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THE AMERICAN School Board Journal

October



OCTOBER
1912
Vol. XLV. No. 4

A PERIODICAL OF SCHOOL ADMINISTRATION

WM. GEO. BRUCE
PUBLISHER

New York MILWAUKEE Chicago

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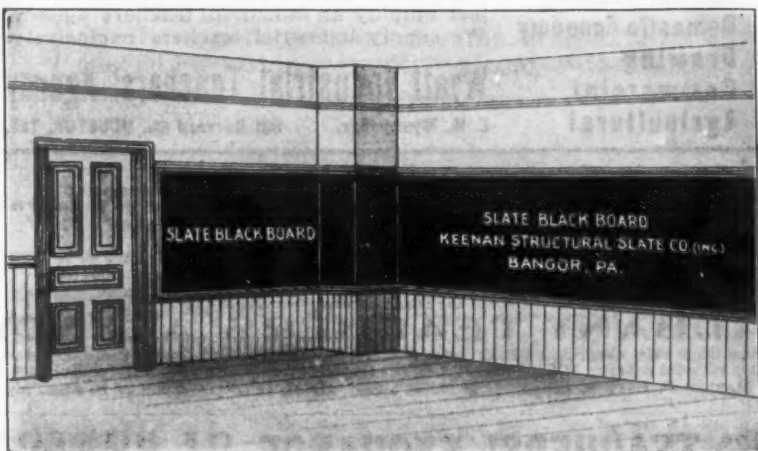
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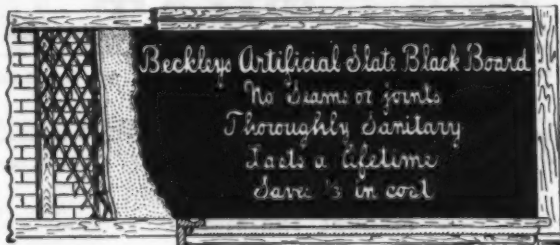
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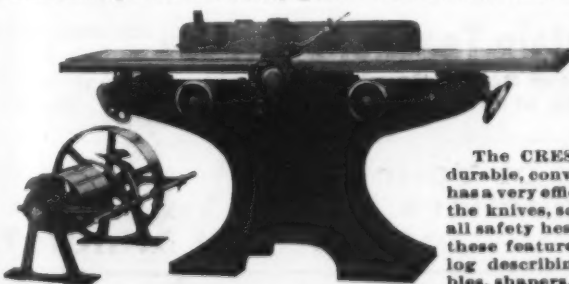
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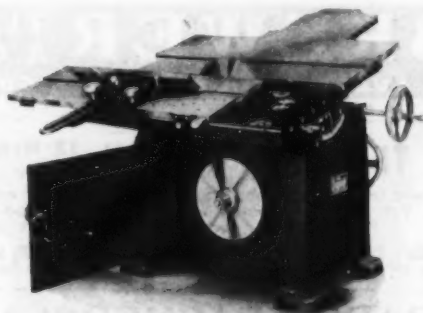
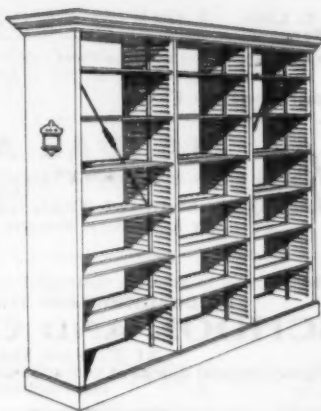
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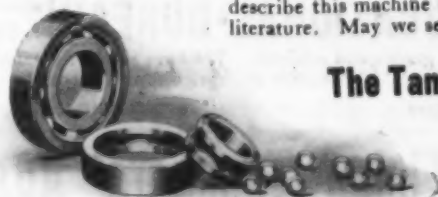
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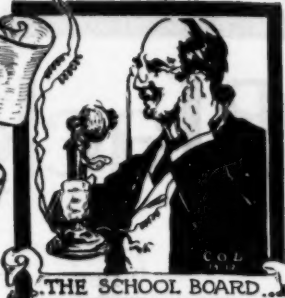
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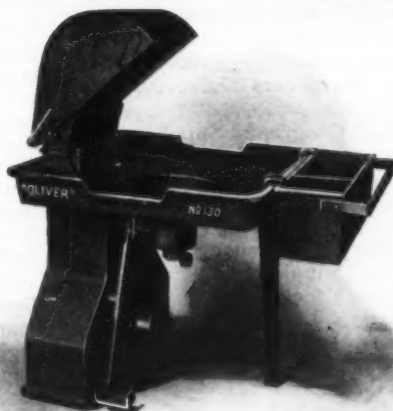
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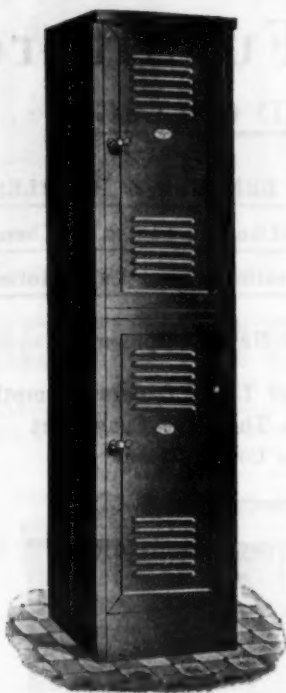
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106 N. La Salle Street

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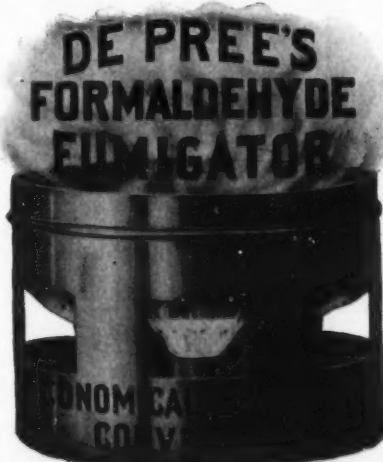
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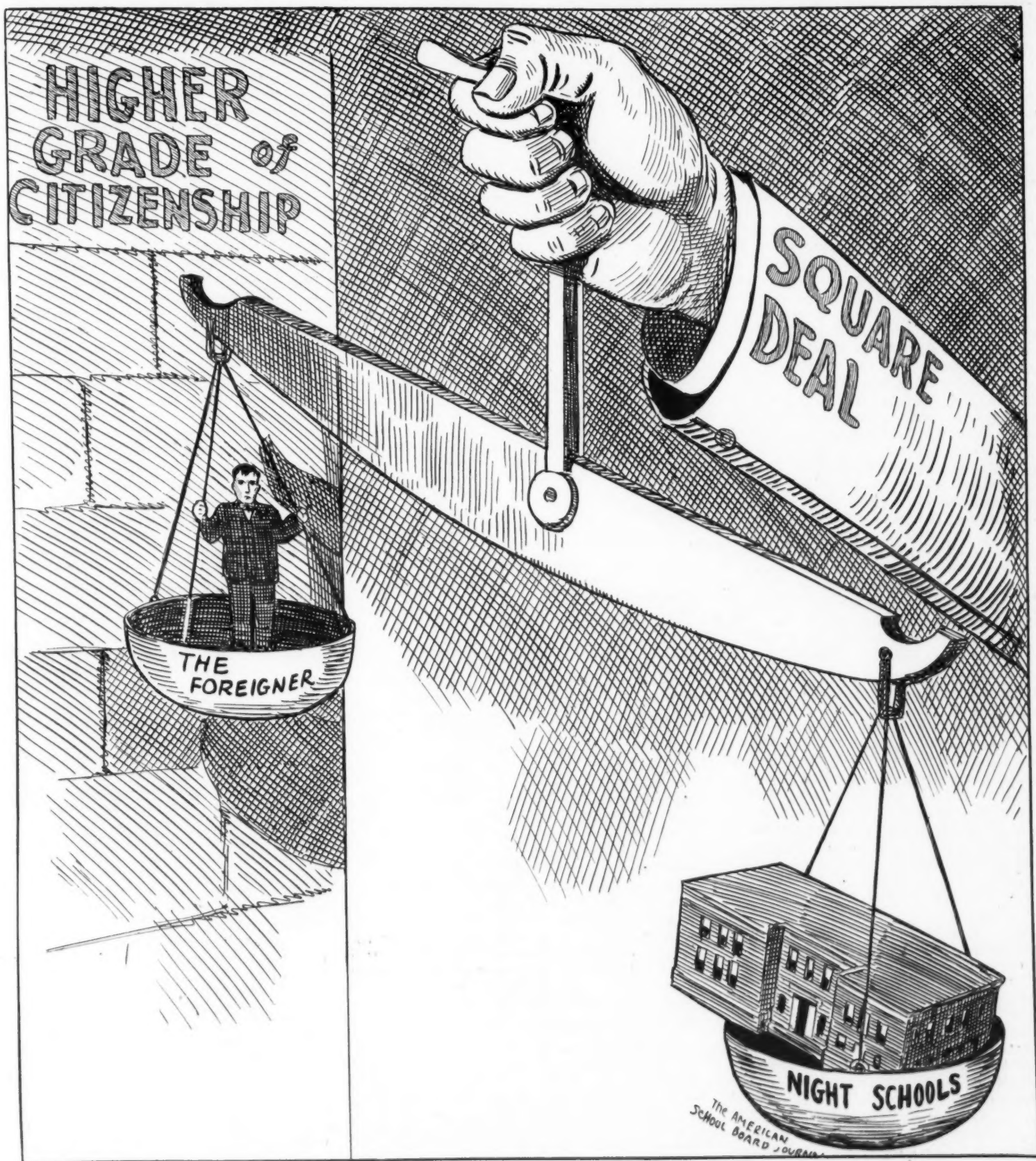
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THE REAL JUSTICE SCALES.



The Specialized or Vocational vs. The Composite High School

ARTHUR DEERIN CALL, District Superintendent,
Hartford, Conn.



Compared with the Latin schools of our earlier time, schools typified by the Boston Latin school antedating Harvard College by a year, by the Penn Charter starting before the close of the seventeenth century, our secondary schools of today represent a long, wholesome advance in American thought and practice. These very pioneer schools, and their like, represent in themselves a rich and sane evolution. Our secondary educational system, like our other human institutions, is not perfect, but I have little patience with most of the indiscriminate, destructive criticism of our public high schools. They have done, they are doing, they will continue to do a great service toward the promotion of the ideal at the basis of our democracy.

And after all, is it not by this standard that we must measure the results which we think we accomplish in our educational endeavor, this standard of the ideal behind our democracy? That is to say, does our system provide a full and free opportunity for every youth of whatever section or station to make the most of himself, to promote his own enjoyment in the service of the common weal? This, I take it, is the great aim of all public service, to provide the freest possible opportunity for each to work out his own happiness in the service of an advancing democracy. Any adequate discussion of an educational problem, it would seem, must start and end in this proposition.

Of course, there is a difficulty involved in the word "opportunity" as used in this relation. "Opportunity" for what in detail? And how best is this "opportunity" to be provided?

An Error.

It will probably be granted that our high schools, like our colleges, have over emphasized a bit their duties to a selected few. No one person is to blame for this, no one set of persons. It has grown largely out of a general haziness in the minds of most of us about culture, and a dense darkness regarding the specific needs of society. We have seen clearly that doctors, lawyers, clergymen, teachers, must be provided. So, drawing upon the rich stores of the ancient world for most of our models, we found a way to manufacture these desirable persons fairly well, at least to the a bit complaisant satisfaction of the doctors, lawyers, clergymen, teachers.

We forgot, or ignored if we remembered, that only four per cent of our population are professionally engaged. Or, if we knew the facts we assumed rather *a fortiori* that the training which worked so well for the professionally inclined was the best possible preparation for all. Our great law giver, the General Emeritus in our educational army, Charles Eliot, still fervently contends that the best preparation for life is to prepare for college.

Now, this theory has worked. Let us confess

[Editor's Note—There are hundreds of men who can discuss a problem. Every individual contributes a thought to the discussion. One, and only one, will raise himself above the hundreds to define the status of the problem. Mr. Call summarizes, simply and completely, a problem which is nearing solution. This paper, which was read during the Chicago meeting of the National Education Association, is a concise statement of the case and defines the situation which confronts us today.]

to the truth. It has worked impressively in important instances. We must tread softly here, for you and I are flowers of this very system. It should not be surprising, therefore, when we find opponents to innovators in this sacred field.

And yet we are awakening to newer connotations in the word "opportunity." We can agree with Great Britain's distinguished Professor Murray that a "deep decay has eaten into the study of classics in America," and thank him sincerely for recognizing the truth which we all consciously or unconsciously feel, that "the time has come which demands a deeper and more solid—and therefore, a slower—education. Great insurgent forces are at work in the United States and citizenship will require in the future a finer training and vision than in the past." In short, there is a wide area of genuine loyalty to the culture of the old school. This is quite true, and hopefully true.

The New Demand.

We can also see, however, that the so-called "practical sense" of our people is very strong. The demand for a short, cheap, effective training to meet the demands of the field, shop, conveyance, trade, home, is a real demand. Given a demand we are disposed in America to meet it. Hence the high school, deciding never to give up all that made glorious the past, is struggling to do its share to meet the practical situation in a practical way, to meet the need of the 36 per cent of our population engaged in agriculture, the 24 per cent in manufacturing industries, the 10 per cent in trade and transportation, and the 20 per cent in domestic arts, as well as those of the 5 per cent in our high schools who go to college.

And so, as an outgrowth of our efforts to interpret more widely the significance of the word "opportunity" in these latter days, we witness the growth of agricultural, industrial, commercial and domestic art courses on a wondrously increasing scale. We explain to ourselves that these serious, though often ineffective, attempts aim to do for the industrial what we have been doing so long, and for the most part so well, for the professional workers.

Granted that the high school must continue to meet both the old and the new demand, one immediate question to be answered is, Where shall these two lines of educational activity be carried on? To be precise, shall we have separate, special schools with a vocational bent for the practical courses, or shall we combine all secondary activities in one composite plant, albeit the courses be kept distinct? Thus our question is one principally of organization.

Fundamental Theses.

There are arguments on both sides. Indeed, both systems have been pretty thoroughly tried in various and differing centers of our land. When I was asked to prepare this study, I at once settled upon certain fundamental theses—theses, I confess, springing from a pathetically limited first-hand experience in such matters, in a large amount of *a priori* speculation, and in the hypnotic suggestions from a few men whom I greatly respect. The theses were:

1. The tendency towards specialized high schools has gone too far in some quarters.
2. Economy requires less speed in this direction.
3. There should be less duplication of plant, laboratories and the like.

4. Pupils should not be asked to go so far to reach the "special" schools.

5. Many facilities are now practically forbidden a large number of students because of the inaccessibility of the "special" schools.

6. The "special" school removes pupils from the "composite" school, hinders the promotion of democracy, and tends to promote class feeling, etc., etc.

These theses have given me some interesting experiences. I found, for example, that they meet with enthusiastic support from the small cities, and with a rather generous disapproval from the large cities. In trying to analyze the reason for this divergency among the doctors, the conclusion seems justifiable that the large cities, being more directly interested because more acutely in need of industrial schools, and having the resources with which to act, have proceeded along the one shortest and most practical way and begun their experiments with the special schools.

These schools are usually centrally located, launched with industrial fervor, but of very little significance, I believe, so far as real vocational training is concerned. Of course this last is not true of the trade school, but it is true of the industrial work in high schools. Officers of the large cities grant that most of the theses are true for small cities. I venture the question, If they are true for a small unit, are they not also true for a large city which is but a series of small units? So at least for the purpose of this paper, let us forbear separating the problem into large and small city phases.

Arguments for the Special Industrial School with a Vocational Bent.

The arguments which I have been able to find urged in favor of the separate industrial school may be briefly enumerated as follows: It permits the economical concentration of equipment, avoiding unnecessary duplication. It permits the concentration of the teaching force, enabling the work to be done with fewer instructors. It permits the concentration of individuality in the work; such as enabling the school to fit the English to the industrial pursuit rather than to preparation for college. The administrators of the regular high schools have not proved to be willing or competent to administer successfully effective industrial courses.

From some sources I gather that the separate industrial school produces better results. One superintendent from a large city writes: "The kind of work that is effective in industry or in business is not possible in a composite school. For this there are many reasons. First, it is impossible, unless the administrator in the building knows the field, and that almost never happens, because principals are chosen according to traditional ideals. The efficient vocational school is possible only when the academic and vocational studies are correlated or dovetailed together. The student who is taking a business course needs a different kind of English in part and in practice from that one who is headed for college. Third, the effective vocational school has an entity of its own, for it must establish a bureau connecting with those who employ the product. These seem impossible in a composite school. The fact is that it is impossible to secure the results in a composite school that are possible in a separate school."

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The Commissioner of Education in Massachusetts believes that "The vocational school must be something set apart; that a vocational school must have its equipment, location, etc., determined by the conditions of the vocation for which it prepares; that a commercial high school and a high school for machinists should not be in the same building and cannot interchange equipment." He urges that "A school for tailors would not use the same equipment as a school for carpenters, and a school for carpenters would use little of the same equipment as that used in a school for machinists."

In general, Mr. Snedden doubts the element of validity in what might be called "general vocational training." He grants that every general or liberal high school have opportunities for manual training for boys and household arts for girls, but that these should be simply a part of the program of general education, and that we should not deceive ourselves into thinking of it as "vocational." The composite high school is rarely going to give, in his estimation, vocational training.

And yet Dr. Snedden agrees to the objections against supporting different "classes of pupils," and "that it would be ideal if we could have all of our schools together." "There is, of course," he says, "not the slightest reason why several vocational departments should not be on the same block with the general high school. There would be some economy in giving such studies as English. On the other hand, most of those who discuss this sort of organization are not thinking of vocational education at all, but of some two-hour a day scheme of shop training, which, as my experience indicates, is of little value for purposes of vocational education."

"The question of the location of the vocational school is an important one. It will probably have to find its location in the neighborhood where the industry for which preparation is being made is carried on. It is the feeling of the business men of Boston that the High School of Commerce there should be located in the heart of the commercial district, although reasons of economy have hitherto prevented that consummation." There is a sense in which we must agree with Commissioner Snedden's feeling, "that this question cannot be adequately discussed until we have made up our minds as to what we mean by the 'vocational school.'"

Arguments for the Composite High School.

The arguments in favor of the composite high school, or, as it is variously called, the cosmopolitan high school, the general high school, or the university high school, may be briefly summarized as follows: It promotes economy by permitting the use of the same heating plant, janitor service, study halls, social service rooms, and various types of equipment. There is no reason why the pupils in all courses should not use the same library, auditorium, gymnasium, lunchroom. There is no reason why all the schools should not have the same supply room and be run by the same business manager. An argument which has often been overlooked, but a very important argument in favor of the composite high school, is that because of its accessibility and all around equipment, it lends itself more readily to the use of the evening schools with their varying demands.

The composite high school provides articulated courses which enable children to change easily from one course to another. The composite high school presents various life preparing opportunities, and for this reason is more attractive to boys and girls, promoting a larger high school population and a longer attendance. The composite high school promotes democracy among the pupils and among the teachers, avoiding cleavage into classes and the unpleasant results which come from caste distinctions. Another reason for rearing schools of the composite type is that the aims, in the last analysis of the two types of schools, are practically indistinguishable.

In presenting my theses to the various lead-

ers in typical cities of our country, I received replies producing a profound hopelessness in my mind of getting any real assistance from those who are best able to advise. The leaders, even in the large cities, are not wholly in agreement about these theses. The comfortable thing about this is, however, doctors disagreeing, that we are at liberty to say some things which we ourselves evolve out of our own inner consciousness.

At this stage of my mental undevelopment, I am convinced, first, that boys and girls do not usually follow those vocational lines that are preferred by them at the time of entrance into the special high school. Second, I am inclined to the belief that the high school teachers are able to detect special abilities and to promote nascent tendencies as the pupils go through the high school course, and that such abilities and tendencies are made manifest more readily in the composite high school.

Third, as one connected with the United States Bureau of Education, Dr. C. D. Hingsley writes: "About three years ago, while a teacher in the Manual Training School, Brooklyn, I made a study of the geographical distribution of high school students in that borough. We had six high schools, only one of which offered manual training. We found that the Brooklyn high school students were regularly paying over \$100,000 a year for carfare in order to reach the schools of their choice. The Manual Training High School draws to itself a very high proportion of the boys and girls on the park slope, Brooklyn, and draws students who desire manual training from the entire borough."

"Many of these students have to spend three-quarters of an hour or more upon the cars, both morning and evening, adding to the overcrowding of the cars in the morning, and spending to reach our school alone, in the neighborhood of \$25,000 or \$30,000 a year. When you remember that many of these are young girls about 14 years of age, and that all of them are spending time on the street cars that should be spent in walking and getting benefits of the fresh air, you can see how serious a matter it is. The carfare item is a serious drain upon the income of many of the families that find it a difficulty, at best, to keep their children in school." To this, Superintendent Maxwell replies that it is "no objection," that "education is too cheap and easily obtained." Another adds laconically: "Maybe it is better to go farther than to get a 'gold brick' near by."

In St. Louis they have four white and one colored high school, in all of which the same courses are offered. All have an equipment of shops, laboratories, and libraries varying only to meet the needs of the number of students in each school. The quality of the teaching corps in all of the schools is the same, thus the opportunities offered to a pupil in one high school are identical with those in the other high schools. The city is divided into four districts for white children, who are required to attend the high school in whose district they live. Thus the secondary system in St. Louis is based upon the principle of the composite high school, offering all opportunities for secondary education to all pupils. They believe that this is preferable to a system of specialized high schools, and emphasize the importance of promoting democratic ideas through acquaintance and saner judgments which this system encourages. They have worked out with considerable detail the principles involved in the theses which I offer. Philadelphia has just moved a long way in this direction. Toledo is just completing two new complete high schools, each with a capacity of about 1,200. Each is the I-shaped type, the central portion to be devoted to academic work and the wings to industrial laboratories, fully equipped. Other cities leaning strongly toward the composite high school are: Minneapolis, Portland, Oregon; St. Paul, Rochester, Pittsburgh, Denver, Chicago, Milwaukee, Cincinnati.

Conclusion.

There are great unsolved, but essential things which industrial education must provide and promote, such as the favorable admission of pu-

pils to the industries, more practical experience as wage-earners, co-operation between the school and shop, industrial efficiency developing through definite steps to definite occupations, that personal power most locally demanded, recognition by the colleges of high school work in household economics and mechanic arts, reverence for our social institutions, as the courts, the law, the government, the church, the school, the home, the continuance of the educational process as far as possible, applied scholarship, a purposeful life.

Assuming that education must provide and promote these things, we have to grant that our educational system must meet the needs of those large sections of our population outside the so-called professions. In carrying out this program we have come to grant that the whole of the pupil must be led to function, body, mind and spirit; that we must cast our teaching more nearly in the terms of real life, motivating as well as idealizing, vitalizing and energizing as well as intellectualizing and moralizing. Thus granting the importance of the aims of the older schools, we are finding a widening place for industrial education. Granting that the language, history and number facts accumulated and being accumulated must be preserved, and for the most part in our old line schools, yet we are practically a unit now in insisting that industrial training must be likewise provided to meet the practical demands of our industrial life. Industrial courses have therefore become our fixed and accepted policy. Indeed, we are beginning to find that these two types of training are not of that ultimate difference which we at first supposed. We insist now that there is no industrial education worthy the name which does not end in a richer life of culture, and that there is no cultural education worthy the name which does not end in practical service.

But we have not, in our practice, been able to fashion a single course of education equally adapted to both types of schools. So we separate the courses, roughly, into cultural, academic, scientific, classical and industrial. In the organization of schools for the promotion of the best in our democracy, I believe in the composite high school, with courses leading to college, normal school, commercial training for boys and girls, domestic science for girls, manual and mechanical training for boys, each of these departments separate and under the direction of an expert, but all under one head.

So I am convinced after all that my tentative theses are in the main sound, mainly that there should probably be fewer specialized high schools, and pretty certain that more attention should be given to developing composite high schools in various parts of urban centers, as the need may arise.

It is true that high school pupils are problems in themselves. They are not to be treated according to psychology of adults. There is no set organized psychology of childhood or adolescence. The teacher's most practical help is concrete interpreting experience, with real boys and girls. Human development means more than the acquisition of knowledge—it is a growth from within. The teacher's vital concern is to remove the obstacles from the way and to provide for those reactions which best promotes this growth, representing the whole child in distinction from the body, mind, spirit, memory, feeling, or will of him taken separately. Different periods of child development present different demands upon the teacher's resources, but the demand in all periods is for a closer transition from the school to practical life, and that the child's activities shall spring primarily from his own past and be a generous expression of himself. Better physical bases, closer relation to vocations, and a greater harmony between school and real life are the most hopeful educational tendencies toward our democratic ideal of personal opportunity for all in a progressive society. I believe that the type of school best qualified to promote education in the light of these principles is the composite high school.

THE ORGANIZATION AND ADMINISTRATION OF RECREATION AND SOCIAL CENTER WORK

By ERICH C. STERN, Milwaukee, Wis.

There has of late been a marked development in a variety of tendencies, familiar to this audience, all seeming to converge towards what is here called the movement for recreational, social and civic opportunity. There is, for example, the tendency, upon purely economic grounds, towards a more extended and continuous use of the school plant. People realize that it is poor economy to allow this very expensive system of buildings and play places to stand idle so much of the time.

Again, there is a growing demand for the very facilities which the school plant furnishes. Revived ideals of neighborliness, a new social conscience, the sense of the shame of our cities, stimulate community action through civic clubs. The need of a neighborhood hearth, so to speak, finds the deserted school buildings and raps for admission. From within the schools themselves comes a demand for their wider use, arising from a broadened conception of their social responsibilities. Manual training, gymnastics, cooking, gardening, and well equipped playgrounds bear witness to this broader conception, as do also the evening and vacation schools, and more lately the trade and vocational training schools.

Many of these demands for a more thorough exploitation of the school plant are embraced in another great movement, whose aim is the establishment of social centers, with emphasis upon supervised play and pure recreation.

Apart from the school realm proper there are kindred factors of great significance. Foremost among these is the National Playground and Recreation Association. This association teaches the need of wisely directed play and recreation, which must be "educational, and yet without any suggestion of the organization or atmosphere of the school." Another related tendency is found in the increase of municipal functions. In addition to parks and playgrounds, cities are called upon to furnish natatoria, bathing beaches, outdoor gymnasias, recreation buildings and neighborhood centers, and to arrange popular entertainment for Independence Day and other holidays in order to render their observance more "sane" and attractive, while libraries are reaching out by means of branches and are actively seeking patronage.

The Movement Educational.

Now all these tendencies are factors in the movement for recreational, social and civic opportunity. Hence to unify this movement for purposes of systematic administration, all these factors must be taken into account and their common characteristics discovered. At once it is plain that all these matters have to do with education. Although public recreation must not be paralyzed by formal education, neither must it be confounded with haphazard play. It is to be educational recreation. In the next place we are struck with the fact that these tendencies are very largely focused upon the school plant which furnishes the greatest facilities ready at hand. Many do not appreciate the full truth of this because they fail to see in the traditional education and old type of schoolhouse any susceptibility for expansion and re-adaptation. The movement for public recreation is really a movement to make education overflow its previous bounds, both theoretical and physical, and, without disturbing the kernel of formal instruction, to give its beneficent powers a wider scope.

Thus far the component factors of the recreation movement have not been unified, but have been advocated as separate causes by individuals and associations, that have led the advance in their respective communities. It was the period of experimentation and of propaganda through private initiative. But gradually, out of the confusion of many impulses, the sense of relationship has emerged and citizens generally have come up with the leaders. Hence the demand that these related matters be systematically co-

ordinated, and taken over and carried on by some regularly constituted municipal authority.

The Problem Defined.

The problem, therefore, is, what shall this authority be? Shall it be a new and separate agency, or shall it be an already existing department?

The plan for an independent branch of government to carry on this work has many able advocates. It is felt by them that the subject of public recreation is not only of enough importance to be placed under a separate board, but that it is so distinct from other community interests that no existing board can safely be entrusted with its development and administration. This has notably been the tendency where the approach to the recreation movement has been through the playground rather than through the school. Hence in many cities the voluntary playground associations of earlier days have been recreated into recreation commissions under municipal sanction. An independent board undoubtedly has certain advantages, particularly during the developing period. And such a board is absolutely necessary where existing agencies show a lack of hospitality to the newer functions which may still prove to be properly theirs.

Nevertheless the commission form of control is open to certain weighty objections, especially if we assume that the period of propaganda and surveys has passed, and the time arrived for a logical, efficient and permanent method of administration. Americans have become prodigal of commissions. They are born of enthusiasm but soon languish because of inefficiency. They may be very useful to draw attention to a new idea, but usually fail to develop it. Of course this does not apply to the well-paid expert commissions of modern government, with well defined duties and large responsibilities. But irresponsible, unpaid boards of "leading citizens" too often prove ephemeral and lacking in the power of sustained effort. And, besides, their multiplication tends towards undesirable confusion of governmental machinery.

Recreation Not Strictly Municipal.

Another strong objection to the recreation commission, as a permanent device, follows from the wrong assumption that recreation is a distinct municipal function. Recreation is doubly related to other functions, such as the schools, the parks, the libraries. It is related to them, first, in that it proposes to liberalize them, and further because it has to use their facilities. It has almost no tools apart from theirs. Almost all recreational facilities which our cities have, or are likely to have, are found in connection with the school plant, the park system, the streets, and existing public buildings, all of which are under the jurisdiction of their respective boards. On account of this double relationship recreation commissions would inevitably entail division of authority between themselves and these other boards; not necessarily hostile conflict, but most certainly ample opportunity for friction, and a dissipation of responsibility which is not favorable to efficient administration.

Another aspect of the problem which casts doubt upon the expediency of a separate department is to be found in the mere size of the administrative machinery required. The fully developed system of recreation will be ubiquitous and co-extensive with the boundaries of the cities. To start even a single playground properly you must have a trained supervisor. For a vast system of playgrounds you will need not only a large number of such experts, but you must have the whole hierarchy of employees, with all the machinery for their fit selection, consisting of a central office force, superintendent, secretary, directors, teachers, and a host of more or less skilled subordinates, down to the caretakers of the grounds and shelters. Now add to this the recreational activities in the parks

and streets and within the schools and other public buildings, and it becomes apparent that systematic recreation requires administrative machinery of great magnitude and complexity, comparable with no other department save that under the board of education. But that department has the necessary organization. Would the duplication of this machinery be justified?

Board of Education Best Administrator.

If the plan of a separate department be rejected the next question is, which of the existing agencies of city government is the logical one to undertake the administration of systematic recreation. Everything that has already been said clearly points to the board of education. It appears that the problem is essentially bound up with education; that the requirements call for extensive and costly facilities and for highly organized administrative machinery. Not only does the school plant extend into every neighborhood and offer the greatest opportunity for supplying recreation, but in many cities it is already used for this purpose, and in many more the same thing is urged. As for the administrative feature, the school department already has such various subdivisions as music, gymnastics, truancy, medical inspection, manual training, etc. It would be quite simple to add a division for recreation and social centers. With a really worthy supervisor at the head of this division, having at his disposal adequate funds, no reason is perceived why the new work would not thus be most satisfactorily advanced.

On behalf of a separate board it is often argued that, since its sole interest would lie in recreation, it would further this cause with singleness of purpose. But it is to be observed that an even greater concentration of duties would result from the appointment, by an enlightened school board, of a supervisor of recreation. And in addition, the supervisor, being a paid expert, would give promise of more continuity of purpose than a commission, while the whole organization of the education department would imply a guaranty of efficiency.

The fact is that, whether or not you have a recreation commission, the schoolhouses and adjacent playgrounds are going to be greatly modified so as to meet the new demands made upon them. When school boards themselves come to take a broader view of their functions, as they inevitably must, they will not permanently tolerate a division of jurisdiction in their domain. Consequently the establishment of a separate board would, after all, not succeed in finally co-ordinating all recreational activities.

Playground Supervisor.

Through the school board and its supervisor of recreation complete co-ordination in this field can, it is believed, be attained. All playgrounds outside the parks and many other recreational facilities could safely be turned over entirely to such an official. In other cases the matter would have to be left to mutual arrangements between the school boards and other boards. This, to be sure, would still leave some division of authority; but it would be reduced to a minimum, and, being based upon logical grounds, would not often give rise to friction. The average park board, for example, realizes that it has neither the equipment nor the means to carry on quasi-educational work, and will be glad to be relieved of such a burden. The school board, on the other hand, has both the functional and administrative requirements, and its wonderful system of buildings and playgrounds is the very fulcrum of the recreation movement. In its case the question is only one of rising to the occasion.

It is by no means the purpose here to dogmatize. The desire is merely to make some general suggestions based upon an analysis of the recreation movement. Until the separate factors of the movement have been fused through a realization of their common purpose, their development

The Educational Side of the Schoolshop Problem

By FRANK HENRY SELDEN

Perhaps we can get a better understanding of the Industrial Education discussion by considering its educational value rather than its commercial value. There may be some reason for the school shop other than to keep Germany from getting all the trade of foreign countries away from us. I believe no one has yet charged that fear of foreign competition had anything to do with the establishing of the first independent manual-training school, nor with any other of the early schools of a similar character.

Nor, has any one charged, so far as I can learn, that the boys graduated from these early schools did not make good most thoroughly, some in industry and some in college life. The real difficulty appears to be of a somewhat later date and from causes not generally understood. I believe that if we will inquire carefully as to the real educational value of the school-shop work many of the present questions at issue will no longer trouble us.

A Great Change in Industry.

There is probably no better way to get a clear understanding of the educational value of tool work than to trace the development of industrial or trade activities from early times up to the present. By such a study we will be led to see how a great change in all working of solid materials has been accomplished, and how this change has given to the world a body of material capable of being organized into a subject for the school course.

Unless we do see this change in industrial intelligence we are unable to give a reason for the long delay in placing tool work in the schools and also are unable to distinguish between such shop studies as belong to the present and those that belong to the past. We, without this knowledge, would find it very difficult to determine whether the boy is actually being fitted for modern industry or for the industry of the times that knew no steam engine and no machine tools.

There is probably no better way to gain an understanding of the field covered by this science than to trace the development of working solid materials from the days of craftsmanship to the highly scientific methods of our best modern mechanics.

It is impossible for us in one article to go over even a brief outline of the history of this change. We will therefore omit the very interesting chapters telling of the days of the craftsman, when no ray of light from a science of working solid materials was seen, although these chapters are quite essential to make clear the change and value of the later methods.

The First of Modern Industry.

The first ray that penetrates the horizon of the eminent author of the "Industrial History of England," Mr. de Gibbons, from whom we quote, is in the life and work of Josiah Wedgwood, who was born in 1730. Of him he writes, "His efforts and experiments were magnificent and untiring." He tells us that Mr. Wedgwood was "the man who first made the art of pottery a science," and that "before his death he brought this manufacture to such a pitch of excellence that few improvements have been left for his successors to make."

Although there is little truth in this last statement, in the light of present-day industry, it furnishes a background for the statement of the author that follows, in which he says, "We have now reached a turning point in English industrial history, and are about to study a period that is in every way a violent contrast to the centuries that preceded it. We have come to the time when machinery begins to displace

[Editor's Note—Mr. Selden's faithful adherence to certain ideals has won for him a unique position as a theorist on the Industrial Education problem. This discussion, beginning with an excellent description of the evolutions of industry, will form an important contribution to the literature now being published on the subject.]



manual labor." He then tells us of the change in social rank of workmen and calls these changes altogether an industrial revolution.

He observes the decline of apprenticeship and yet the advance of industry, but fails to discern the reason for this seeming contradiction. The "decline of apprenticeship" is by no means a matter of our generation, nor has it resulted from present-day causes. The cause is evidently far back in the nineteenth or close of the eighteenth century.

Only by way of the products of Josiah Wedgwood's factory is Mr. de B. Gibbons able to discover the dawn of this industrial change which he calls a science. Even the inventions of textile machinery and the establishing of factories filled with machinery failed entirely to attract his attention to the metal working industry, or to lead him to observe the fundamental change in the methods of work. He ate off a plate made by Wedgwood, and he wore cloth made on the textile machinery, and to these two classes of manufacture his observation seems to be limited.

Development of Metal Working.

We must read between the lines to get the essential information that a large number of workmen had been rapidly trained and set at work in the metal or engineering trades. How many, we can only conjecture by estimating from some fragmentary facts. One author states that in and about the town of Dudley there were twenty thousand workmen in the metal trades. It is sufficient for our purpose to know that the factories multiplied rapidly.

We do not need a historian to tell us that as factories multiplied and large numbers of machines were built and set in operation that workmen and plants were required to build these machines, and therefore that large metal-working plants also were established. By this we know that the day of the scientific workman of solid materials was dawning. This is a corollary, although the historians of that period do not appear to appreciate the fact.

A Great Invention.

Many things tended to bring about this industrial revolution of which historians write. Most of these were only secondary or incidental. The real turning point that marked this revolution from craftsmanship to modern scientific tool usage and made possible all this progress both in textile machinery and in all other machinery, including that for working metals, was no doubt a single invention. An invention that changed the tide of industry and power over solid materials as certainly as any battle ever turned the tide of civilization or the power of a nation.

Mr. de Gibbons notices the development of the steam engine and the almost hopeless failures of Watt and others, and also tells us that improved methods of working the materials

saved the day for Watt and his invention. This is a significant fact, and when we get to the real cause of this change we find ourselves dealing with one of the most important incidents of all history, the real turning point of industrial progress. Yet a fact almost entirely overlooked by the historians and because of their oversight we, of today, have been groping in the dark in our studies of industrial progress.

Change from Muscle to Mind.

Why was Watt likely to fail? Why did he succeed? Because his invention was on the craftsmanship side of the industrial divide. Muscle-directed tools could not sustain the intellectual progress of the times. Physics had brought into use laws that required a higher type of workman than could be produced by any amount of accumulated muscular reactions. The time had come when the working of solid materials must change from muscle to mind or industrial progress must stop. The human mind had gone its limit in physics until it should also be the power in definitely shaping the materials to apply the principles of physics.

Men might discover laws and theorize on their applications, but the cold metal would not get in place to make the theory effective. Bramah could invent the machine to use the principle of the hydraulic press, but there was no really successful press until someone could add to his discovery or invention such a knowledge of the working of materials as would place the metal cutting tools under definite control. No longer could the skill of the craftsman, whose tools responded to muscular sensation, shape the material with sufficient accuracy to utilize the principle of the invention. Only by going a step farther and discovering the laws controlling the use of the tool could the workman become master over the solid materials.

At this time almost as quietly as the sunrise the humble lad of Woolwich Arsenal commanded and it was done. For the first time, as far as history reveals, certainly so in a practical sense, he made the tool of an iron-working machine go at his bidding with the skill of the human hand a negligible factor. Thus in the dingy shop of the English locksmith the greatest mechanical invention of all time was achieved, and all lines of industry could take on new life.

So great was the change wrought by this invention, that its influence spread like wild-fire throughout industrial England. The tens of thousands of workmen who were trying in vain by the methods of the craftsman to supply satisfactory machinery and appliances for the textile and other industries could not avoid adopting the new order created by this invention. From that day to this, one of the important factors of the improvements in mechanical science is that they must be adopted. It is no surprise that this should result in an industrial revolution.

A Law Discovered.

The significant part of this progress was not the mere improvement in a method of using a tool, but the change from skill to intellect as the chief factor in high grade workmanship. It was not in the eliminating of skill as a prominent factor in one tool process, but the discovery of the laws on which the tool operated so that it could be placed in a rigid machine and made to go at the bidding of the operator. So long as the mechanic knew his tool only by the empirical knowledge of experiment or by imitation of its use by others, its use in a rigid machine was impossible.

Only by a discovery or determining of the principle of its action could the skill or reactive muscle of the mechanic be eliminated. That a principle was discovered rather than the mere invention of a mechanical appliance is readily shown by the rapidity with which the principle was applied to a variety of machines. This change from muscle to mind or from using tools by imitation to determining their use

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The Hygiene of the Eye

By H. L. HILGARTNER, M. D.



It is too often forgotten that the eye is a part of the body more or less associated with every other part and subject to reaction therefrom. Even general muscular fatigue causes a systemic condition in which work for the eyes would not only add to the general exhaustion, but might strain the eye itself as dangerously as if the fatigue had originated in that organ. Similar precautions are necessary in conditions of bodily weakness such as are experienced in convalescence from any wasting disease, during which great care should be taken not to tax the eyes.

On the other hand, the first symptoms of the disorder of some other organ may be felt in the eyes, and even the physician, without special training, may fail to diagnose correctly the true cause of the eye trouble. For example, many disorders of the eyes may be caused by indigestion, and can be remedied only by treatment of the digestive tract; or the liver or the heart may be the seat of a disorder first noticed by effects in the eyes. The kidneys are peculiarly important in this connection, because they are especially deceptive to the protean forms in which they manifest symptoms of disease; frequently the first recognized symptom of Bright's disease is failure in eyesight. Often it is the oculist who first discovers the presence of that dread disease in a patient who has sought his services to prescribe spectacles for a defect in vision attributed to the effects of age or some weakness in the eye itself. Both current and after effects of many other diseases, such as diphtheria or scarlet fever, are more or less generally known.

Reaction of Eye Upon System.

In the second place we may mention some effects felt in other parts of the body of causes located in the eyes. Often one suffers from headache caused purely by strained eyes without feeling any effect of such strain in the eye itself. Such a sufferer may seriously injure digestion or nervous system, or both, by dosing himself with headache nostrums, or by medical treatment for indigestion, biliousness, or what not, who might have found almost instant relief from accurately suited spectacles. A competent observer will find such cases by the thousand. Instead of as a headache the eye strain might be felt as a nausea, either chronic or acute, and attempts to treat the symptoms instead of the cause often work damage instead of relief.

The sensitiveness of the general system to unusual excitement of the eye and to the brain centers immediately connected therewith, may be illustrated by the sickness experienced by some individuals when riding in a railway coach, especially when riding backward, which is probably caused by the unusual excitement to the eye in the effort to adjust itself to an incessantly shifting and tilting horizon. Perhaps the most rational explanation of seasickness involves similar reactions.

Hygiene of External Coverings.

Much that would be interesting might be said of the anatomy of the eye and of the admirable

[Editor's Note—During the past few years startling statistics have been compiled and published revealing most serious conditions among school children. The eye has not escaped inspection, and is now credited with more power and charged with more responsibility, for all sorts of ailments, than was ever expected. Dr. Hilgartner discusses the problem from a scientific point of view. Paper read at University of Texas, Austin, Texas, July 23, 1912.]

means adapted for its protection in the orbit in which it is situated; but the time at our disposal will limit us to a brief statement of some salient features in the hygiene of the external coverings of the eye and in the hygiene of vision, omitting anatomical descriptions, interesting as they would be.

Anteriorly the eyeball is protected by the eyebrows, eyelids, and eyelashes. Besides their influence on facial expression the function of the eyebrows is to protect the eye from dust and perspiration and to give shade to the eye. Drooping out of the hairs of the eyebrows or other defects should be treated upon the same principles as hair defects elsewhere.

The eyelids are formed of skin, connective tissue, delicate muscles, thin plates of cartilage, and the smooth lining membrane called the conjunctiva. These loose tissues afford an apt place for swelling from various causes. In a recent injury from a blow, cold in the form of iced compresses is indicated to prevent further exudation, though in later stages hot compresses may be necessary to promote absorption. As a hygienic measure, bathing with cold water night and morning is the proper regimen, being careful to keep the lids closed so that water does not come in contact with the eyeball. At all times caution should be used to insure cleanliness of towels and so forth; because, frequently, infections, sometimes of the most serious nature, result from towels used promiscuously. Let me repeat with emphasis that cold water is always better for the eyes than warm water, unless the latter should be indicated in some disease.

Unusual Disturbances.

The presence of foreign bodies, such as cinders, beneath the lids is a frequent cause of discomfort or suffering, and serious abrasions of the cornea may result. Such conditions are easily dealt with by anyone who will carry out the following simple procedure, which will do for the majority of cases, though if the cinder should be imbedded in the cornea the services of a competent physician are necessary. First, let the patient look downward; then seize the lashes of the upper lid and by gentle traction revert it over a pointed pencil or the end of a penholder held midway between the lid border and the brow; careful observation will generally reveal the irritating particle stuck to the inner lining of the lid, and it may be wiped away with the point of a clean handkerchief. If the foreign body be of a nature to react otherwise than mechanically, some means for neutralizing such action should be used immediately, to be followed by the physical removal; for instance, with quick lime in the eye use a concentrated sugar solution followed by sweet oil, after mechanical removal of any particles of sensible size.

In the case of acid burns use milk after the acid has been washed out. Acute inflammations are usually due to infections, though such might result from eye strain. Purulent inflammation of the conjunctiva may be quickly fatal to the eyes and the least delay, especially in new born infants, is extremely dangerous. Scrupulous care also should be taken against the infection of other members of the household.

For chronic inflammations, for instance, granulated lids, skilled treatment is required because great damage may be done by the unskillful use of the necessary remedial agents, such as blue stone and caustics. Chronic inflammations have

various causes, such as eye-strain, nasal catarrh, diseases of the tear apparatus, etc.

Hygiene of Vision.

Inflammations due to eye-strain, in the majority of cases, can only be relieved by correcting with glasses the error in refraction that causes the constant strain of the eye muscles, which in turn brings about the congestion of the tissues involved. Salves, ointments, or lotions may alleviate but can never cure such cases.

Hygienic care of vision depends primarily upon proper supply of light, upon suitable positions or postures for prolonged work with the eyes, and upon avoidance of fatigue or strain from overwork. The light should be sufficient, well diffused and free from glare. The position should be such that the light falls upon the object of attentive vision and not "in the face." In reading the light should come chiefly from the side, and in writing from over the left shoulder. For any continued use of the eyes the head should, if possible, be kept upright because in that posture there is the least liability of ocular congestion. There is a tendency to read and sew at too close range.

The proper reading distance is about fourteen inches; but no type should be used that is not clearly legible at twenty inches. The book should not be held in the lap or on a flat table, because continued downward rotation of the eyes is fatiguing and stooping of the shoulders and contraction of the chest almost surely follow. Reading in a recumbent posture is a common but pernicious habit, frequently causing tedious troubles. It may be remarked that continued looking upward, or in any unnatural direction, is excessively fatiguing to the eyes. When drowsy or tired one should not use the eyes.

Dr. Walter L. Pyle of Philadelphia, is quoted for the following: "The effects of smoking and drinking on the eyes are often exaggerated. Of course, if there is such excess practiced that the whole system is affected, the eyes will participate. * * * A particular danger of tobacco smoke is its irritating action on the conjunctiva, particularly when the smoking is done indoors and while reading."

School Hygiene.

The hygiene of the eye is of especial importance in schools. There infection needs to be particularly guarded against, and there proper arrangements for light and proper postures on the part of the pupils are of unusual importance.

Ordinarily a healthy child with normal eyes may begin school at eight years, when its ocular tissues have been well formed. The fashionable practice of sending very young children to so-called kindergartens where they play with small objects and look at pictures or sew at close range is certainly injurious from this standpoint. Such children ought to be playing for the most part in the open air and looking chiefly at distant objects.

In view of the effects of eye-strain and ametropia in retarding the intellectual and physical development of children there should be competent inspectors of schools empowered to compel hygienic regulations, and able to detect and report to teachers and parents the individual pupils already suffering from defective vision.

The light should enter the schoolroom directly, not by reflection from an adjacent wall; spacious windows kept clean should admit light from the left or left and rear of the desks.

Light from the right makes shadows of the pupils' hands and arms on their paper; light from the front is the worst of all; and cross-lighting by windows on opposite sides produces annoying shadows. Window shades should be two for each window, so that either upper or lower half may be shaded. Venetian blinds also make good shades when properly used.

Further Requirements.

The size of the desk should be adjusted to that of the pupil, or injurious consequences to back and chest, as well as eyes, follow. With proper lighting, written characters one and half inches or two inches high, ought to be legible on charts or blackboards at a distance of forty feet, and if not legible to any pupil it is because of some serious error of refraction, or disease of the eye, that demands immediate attention. In the lower grades especially, reading or writing after school hours ought not to be required. Much might be said about printing and paper, and many other points, but I fear it might weary you.

It was recognized at the beginning of the present century that the requirements of school practices resulted in injury to the eyes of many of the children. Extensive labor has been bestowed upon the collection of statistics upon this subject, both in Europe and America. It would be tedious to you to give the details and the bibliography of such statistics. Stated in general terms, it has been shown that eyes with

hypermetropic refraction greatly outnumber the myopic and emmetropic (i. e., normal) eyes in early childhood; that emmetropic eyes are rare, but that the state of refraction most nearly approaching that ideal condition retains an almost uniform percentage throughout school life; and finally that myopia (near-sight) is very rare or absent before the beginning of school life, and advances both in percentage and degree with the progress of the pupils in the schools, while the percentage of hypermetropia diminishes proportionally. Observe that the percentage of normal, or approximately ideal refraction is nearly constant, and that myopia progresses in degree and by percentage very rapidly, and that hypermetropia is rapidly converted to progressive myopia.

Myopia.

We have here indicated the genesis of myopia. The notion that the near-sighted eye was a physiological adaptation to the demands of civilization for protracted use of the eyes at near-work is totally erroneous. Careful study has shown that the development and progress of near-sight is attended by headache, painful eyes, impaired vision, sensitiveness to light, increased lacrymation, also by a more or less tonic cramp in the accommodation, injected external tunics, and hyperoemia of optic nerve, retina and choroid.

If the original error of refraction is myopic the degree of myopia steadily advances, attend-

ed by changes unquestionably pathological, which also advance with the increasing refraction. If the eyes start as hypermetropic, pathological conditions of the same nature generally accompany the increasing refraction as such eyes become progressively myopic. It is obvious, therefore, that the observed change in the form and refraction of the eyes of a large percentage of school children, which continually increases as the years of schooling increase, is not physiological in character.

The acquired and progressive form of near-sight which is found in the schools and various trades is brought about by a distension of the tunics of the eyeball. The progressive elongation of the ball and progressive short-sight advance together, and this process is an actual disease. Progressive short-sight, if not arrested by the use of correctly suited spectacles, remains progressive. Painful symptoms develop; the eyes become less equal to their work; and not infrequently at the age of fifty, or earlier, the power of sight is lost, either from detachment of the retina, or from hemorrhages, or from atrophy and degeneration of the yellow spot.

It would seem that congenital anomalies of refraction, especially astigmatism, are responsible for the myopic eye. The pathological changes that bring about myopia are caused by overworking the astigmatic eye, not by in-

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Social Organization in the High School

By MILTON C. POTTER, Superintendent of Schools, St. Paul, Minn.

Supt. Pearse of Milwaukee recently wrote me as follows: "I feel there is danger, as the high schools increase in size, that the social-human-side will be neglected; also, that wholesome kinds of organizations may be neglected by teachers and principals, with the result that unwholesome kinds may again spring up. I want you to talk in Chicago this summer on 'Social Organization in the High school'."

That is my text.

There is surely no adjective so vaguely used or variously defined as the word "social." For its splendid generic sense the pedagogical pundits of our times delight to use it. But some use it in a specific restrictive sense, and often on the same page put it into violent antithesis with itself.

A great wholesome meaning for society is—all companionable people—those who serve their fellows. Social categories must differ—from philanthropist to paperhanger. But to be considered social any category should be embracing, not exclusive, but inclusive. The anti-social sediment is called the criminal class. The anti-social scum so often called society in various communities let me call the snobulous. Its members are not always necessarily snobbish, but consciously or unconsciously they exercise a toxic influence which all except the snobulous recognize as violently unsocial.

The Old Abuse of High School Society.

I am asked to discuss social organization, not snobulous organizations, in the high school. The latter have done their little worst to make ridiculous their juvenile initiates, together with their fond and foolish parents. Our high school corridors have almost ceased the breeding of snobs and now seldom serve as the favorite promenade for the display of mystic jewelry and the sickly but ludicrous imitation of the college boy's strut.

[Editor's Note—The high school fraternity, which came into existence from the natural demand for social activity on the part of high school pupils, has now been abolished in almost all parts of the country. School authorities have not been prompt to replace the obnoxious influence by something equally good or better. Supt. Potter suggests a solution. The unusual demand for copies of this paper, which was read during the recent meeting of the N. E. A., is responsible for its publication here.]



The condemnation of secret social clubs in high schools by teachers, parents and courts of law where appealed to is practically unanimous. Greek letteritis brought forth a harvest of weeds and wild oats. We need not thresh that old straw here. It is history. But the assumption that organized manifestations of sociability among high school students are evil per se is not unlike certain rather common American attitudes toward various adult activities like lodges or churches or camp meetings. It is so easy on the brain and so satisfying to the conscience just to tag the whole thing "very bad," and then govern yourself accordingly. After that, one has no occasion to perplex oneself with annoying distinctions within the category upon which one has long ago put a definite tag. That is a clever arrangement for the lazy man with a large conscience.

But such a man should not be called too particular, by which word he is sometimes described. Far from it! His generalizations are often so sweeping and so cocksure as to pain and bewilder a really particular person. Deacon Ephraim Josiah McCotton said, "All dances in Hell are begotten"; said Dick to Miss Bly, "Never mind the old guy; to the pure, almost everything's rotten."

Now, your normal healthy high school boy is sure to "do some marvelous doings." And it won't help him any for us to swamp him in our moral and polite generalizations. I think that much of our trouble in high school management

comes from being terribly shocked at some things which boys do as unconsciously as they carry their hands in their trousers' pockets. To assist in organizing a boy's social activity will make him a conscious social being.

Two or three years ago Principal Lasher of the Erasmus Hall High School, in Brooklyn, N. Y., before the department of Secondary Education, and Principal Johnson, of the Chicago University High School, in the School Review, described at considerable length numerous examples of student organization in their schools. Indeed, they handled the subject of fraternity substitutes in rather detailed fashion, which relieves me from doing so.

Separate Social Activities.

It appears from correspondence with several high school principals and from my own experience, that the strongest voluntary organizations in the high school are usually for one sex only. Partial segregation of the sexes, as practiced in the Cleveland Technical High School, for instance, seems to furnish a broad basic condition for healthful social organization of a student body. Some years ago, Dr. G. Stanley Hall said that segregation is always in some degree necessary for full and complete development, and to avoid a settled eviration of the boys. "There is a little charm and bloom rubbed off the ideal of girlhood by close contact, and boyhood seems less ideal to girls at close range."

There is considerable authority indicating the desirability of at least partial sex segregation above the eighth grade, such as:

1. Jordan, David Starr; Higher Education of Women, 1902;
2. Woods, Alice; Co-Education, 1903;
3. Chambers, Will Grant; Evolution of Ideals, 1903;
4. Hall; Adolescence, Vol. II, Chap. XVII, pages 561-647;
5. Co-Education in U. S. and in Foreign Countries;
6. Munsterberg, Hugo; Psychology and the Teacher, pages 306-307;
7. Co-Education, in Baltimore School Board Journal, October, 1911, page 27;
8. Gove, Aaron; Co-Education in the H. S., N. E. A., Proc., 1903;
9. Small, Albion W.; Co-Education in University, N. E. A., Proc., 1903.
10. Harper, William Rainey; Decennial Report, 1903;
11. Riverside Report on Segregation.

Partial sex segregation in many high schools is slowly growing merely as a convenience in program organization. The coming of the high school shop, kitchen and gymnasium has polarized the young people as to these subjects and has necessitated the segregation of boys and girls in some other classes in order to make feasible their segregation in these.

Farther, the tendency toward sex segregation in adolescence is well illustrated, if not proven, by the spontaneous fraternal organizations which have naturally developed along sex lines in all high schools where the administration has been too academic or the teachers too indifferent to originate or supervise proper social activities. It seems as though the boys and girls naturally and unconsciously endeavor to separate themselves in their spontaneous organizations so as to make more formal the occasions of their social intercourses. No one can be blind to certain dangers inherent in that tendency and in those organizations, but no one not blind will fail to see the fact and to reckon with the good that is in it, when assisting students in organizing their clubs and societies.

An Entirely New Institution.

We are the administrative agents of a new institution. The twentieth century high school presents totally new features and problems to the executive.

Yesterdecade the high school teacher just out of normal or high school engaged herself almost exclusively in keeping up with the bright pupils in book learning and in finishing the last pages, if possible, a little ahead of the class. Today your boy is lucky if he gets two or three teachers whose excessive erudition does not forbid their remaining within calling distance of his cries for help. The former teacher was a business competitor of the "clever scholars" as was each "scholar" of every other. The recent type tends to form alleged high school "faculties" with a school life distinct from that of the "student body." Meanwhile the need for social leavening grows greater. The membership has changed. With high school enrollment increasing from three to four times as fast as the total population in the past two decades in forty cities examined, a more various membership is discovered than formerly. By the same token, the demand for effective mixing processes grows imperative.

The place of the high school in popular thought is changing. Today nearly every citizen is a loyal constituent of our "peculiar institution." No legislators or governors are today discussing the familiar nineteenth century question, "Should the people be taxed for the education of the few above the common school?" This public faith in us imposes upon us the public duty of socializing the unsocial.

The high school functions are changing. From having been purely a collegiate preparatory school for a very few, entertaining within its gates sundry ambitious "district school teachers" in the making, and various others who were not old enough, or well enough, to do something more worth while, it is rapidly becoming a receiving station and motivating agency for the final output of the common schools. This makes desirable the introduction of natural acquaintance opportunities in the very first year of high school.

More Fact Than Fiction.

A committee of representative mothers phrased it this way a few weeks ago: "The first year of the high school discourages most of our children. In the last year of the grades they are coaxed and loved to a hothouse rapidity of growth. Then suddenly they are plunged into a chilling atmosphere of tutorial indifference which causes most of them within the year to stay away from the great, new, cold, strange school. High school teachers and first-year children should meet oftener outside of recitations or study."

A school official put the other side like this: "No right-minded people approve of school parties. It is hard to conceive of a dance in a public school building which is not a public dance. The proper school relation is a business relation, not social or intimate in any way."

One of the strongest and most conscientious high school principals I ever knew told a boy in my hearing: "You didn't come here to play. School is business." He was wrong on both counts, I should say, or at least partly so. The boy did go there to play in all likelihood, and a large leaven of play in his teachers would likely have saved that boy.

A school is no part of the factory age. Difficult as it is to maintain consistent order and at the same time avoid mechanizing the "business" of an overgrown city high school into rather inhuman perfection, there are many great hearts who see and sympathize with the still pitiful baby girl or boy beneath all adolescent vanity or vulgarity.

Only if you call the household activities of a colonial fireside "business," can you so denominate school life. Its business is but one detail. It is more than business. It is art. It is politics. It is love. It is play. It is a cross section of all life. That is the vision of a modern high school, which warms the hearts of consecrated men and women, and without which the children perish and are found in the thereafter working in laundries or driving laundry wagons.

The New Teacher.

It is too easy for me to say I am simply a mental mentor to the young. Such a conception of my functions saves me my afternoons and evenings free from their intrusion. But I see across the hall a popular white-haired maiden, upon whom the bloom of age has softly fallen in silver glory, giving every afternoon, and all of it, to the students' affairs; and I wonder. She says that she considers her classroom work the least of her duties, and still more, the least of her privileges. She believes that every real teacher in the high school should feel the imperative call of the young upon her afternoon time and should find it practically impossible to get away before the building closing hour at five o'clock any day.

She is a great teacher. Her kind will before long possess the twentieth century high school. For the youth of the land carry them in their hearts, and the young people make the schools.

The graduates from such schools do not forget such teachers. They return again and again, carrying gifts of buildings and statues and books, of children's fields and baths, and the frankincense of noble thoughts and kindly feeling. At the afternoon parties (for they are never held at night, and never outside the high school building) there are mothers and fathers who delight in the children and who help them in folk games or graceful cotillions to forget the clod of clay which cumber the aspiring spirit and to bring it into unconscious co-operation towards the purposes of school life and of all life. Happiness is a habit. Habits are perfected by practice.

Our puritan educational heritage has given us so much of good that one must regret the necessity of admitting that the theory of life as a "preparation for death" not only shadowed the life of my ancestors but caused their schools to become detached institutions which were not a part of life, but merely "preparation for life."

We all know teachers and officials today who hold this limited conception of the school. Such a school is an isolated pool in which the little fishes grow sleek and fat and self satisfied. Upon a day they are thrown out into the great waters of the life stream to sink or swim or gasp along the shore. They would be more apt to swim, and swim in deep water, if their youth were spent in a bayou, or living tributary of the main stream.

Not only should the commerce department, the apprentice committee, or the vocational committee in any high school keep the adult life of the community in constant touch with the school life; but the social committees will find the same practice invaluable in giving the young people who most need it the proper strength and ease of approach, the unconscious simplicity and poise, which these young ones will find so valuable in the larger life.

What the New Idea Means.

Fathers and mothers will be found who will give their leisure, or even business hours, for the sake of other people's children as well as

their own. Indeed, they now recognize that they cannot corner the social virtues for their own alone. The social graces are ubiquitous. They grow in one by diffusion among many. High school fraternities were violently unsocial. But they pointed the way to social organization, co-operating with fathers and mothers.

Evidence of abiding life interest in high school affairs always delights my heart. But particularly so, if manifested by Greek letter convalescent. The writer if the following letter was one. She graduated from the Centennial High School in 1910, shortly after the surrender of all outside charters and an agreement for the future to organize only inside clubs or societies, with Centennial authority, and always including some high school teacher or teachers:

Belmont, Mass., May 24, 1912.

Mr. Milton C. Potter,

Pueblo, Colorado.

My dear Mr. Potter:

I am going to write you a long letter. You want to know about this school, I know. I have been for some time in Belmont, Mass. Belmont is one of the numerous small towns close to Boston. My uncle is the superintendent of schools here. Through his efforts an organization was formed, known as the "Belmont High School Athletic Club." I am sure you will be interested in knowing about this, and I want to tell you what I can of the movement.

The high school owned no athletic field, and no ball ground was accessible. In the course of a few months after the formation of the high school club, Mr. Underwood, a prominent man of the town, noticed the lack of athletic fields and equipment. Although he had no children, and could not profit directly through it, he gave to the high school a large field to be used for athletics only. The boys were at once interested and began work grading the fields. At present they have a "grid-iron," a baseball diamond, tennis and croquet courts and a fine running track.

The field is about a mile from the schoolhouse, and a mile is too far to walk in football togs, and so the boys decided that they should have a clubhouse. Again Mr. Underwood became interested. The services of an architect were secured. The architect planned for a small clubhouse, built in Swiss chalet style. When the plans were accepted they were turned over to the manual arts department. The work from this time on was done by the boys. Master plumbers, masons and carpenters were engaged to show the boys how to work. The interior is finished with panels and beams. The panels are hand-carved, as also are the porch supports. The huge fireplace has a pair of andirons of iron, representing a claw holding a football. The boys made these in the forgeroom. The curtains and pillows were made by the girls in the sewing classes. The boys made all of the furniture.

The clubhouse is not large. It has an entrance hall and clubroom, and is well equipped with baths, showers and dressing rooms.

The "Athletic Clubhouse" is the pride of the high school. Each student feels a personal interest in it, and it is pointed out to strangers as one of the landmarks, almost rivaling Bunker Hill in importance.

Sincerely yours,

ESTHER LEONE HUNT.

In the new high school nearly every teacher spends nearly every afternoon in some sort of extra classroom activity. A strong student's volunteer weekly schedule might look something like this:

Mondays—Euterpean Society (or some other musical club).

Tuesdays—Cinderella Club (or some other dramatic club).

Wednesdays—The Smithy (or some other crafts club).

Thursdays—The Pnyx (or some other debating club).

Fridays—The Duck Party (or some other party. In one western college town the young people call the high school classes "Onies, Ducks, Trips and Quads," splendidly ignoring the college phraseology.)

The dear young scamps in the high schools are bound to do some scampering. It is our business to keep up with them and make the scampering count for something. Our young people are quite willing not to ape the adult four hundred if something more worth while is presented. With their final recovery from the imitative langours and silly vices of "the grand society" women and young men of the

(Concluded on Page 51)

BUSINESS COURSE FOR HIGH SCHOOLS OF SMALLER CITIES

By IRA B. FEE, Superintendent of Schools, Cheyenne, Wyo.



Only within recent years has there been any general demand for vocational courses in the high schools of the country. In former years the academic courses monopolized the attention of school authorities. Gradually there developed a sentiment favoring the inauguration of courses that were utilitarian in character—courses which tended to train pupils for some rather definite occupations. One of the first to receive this stimulus was the business course, and it is of this I wish to speak. I shall further confine myself to the business course, as I believe it should be in smaller cities—that is, in cities of from six thousand to eighteen thousand inhabitants.

Those who attended the San Francisco convention of the National Education Association last year and who were present at the meetings of the Department of Business Education will recall the excellent address given by Principal Charles H. Murphy, of San Francisco, on the subject, "Curricula for High Schools of Commerce in the United States." The subject is well handled, and the inquiry might well be made why there is any excuse for presenting a discussion on a subject so nearly identical at this time. A careful examination of Mr. Murphy's paper will reveal the fact that it discusses chiefly commercial subjects as they should be scheduled in the largest school systems of the country. The ideal conditions possible in a large city can seldom be realized in the smaller cities of the country. The limited amount of money generally available makes the organization of three or four courses about all that can usually be arranged, and the same cause limits the teaching force so that often those subjects deemed most essential to a business training are offered.

What Other Cities Are Doing.

That I might learn with some degree of accuracy what other school systems are doing in the way of educating pupils for commercial pursuits, on May 17 I addressed letters to superintendents of schools in forty representative cities ranging in population from six thousand to eighteen thousand. I asked for their courses of study, particularly the business or commercial courses. I asked whether both shorthand and typewriting were required if either was scheduled. The number of typewriters used, the number of pupils enrolled in the business course, the proportion of total enrollment in the business department, the system of shorthand used, whether a two-year course were offered, and reasons for or against a two-year course, were other items of information requested. To forty letters written thirty-one replies were received. Nine of these replies stated that no commercial course was offered. The other twenty-two replied with more or less fullness to the questions asked.

The one thing more noticeable than anything else is the lack of any uniformity in arrangement of the course. In about half of the twenty-two replies stenography and typewriting are offered first in the third year of a four-year course. Many of the schools offered stenography and typewriting in both the third and fourth years of the course. A number offered but one year of stenography and typewriting, and of those offering more than one year many required only five recitation periods for the work in both branches each week. Bookkeeping in several of the courses was first offered in the first year, and continued in the second. In other courses bookkeeping was scheduled in

the third, and again in the fourth year. In some courses bookkeeping was scheduled for but one year of five periods per week. Bookkeeping, shorthand and typewriting were the only subjects that the superintendents seemed to agree should be taught. Commercial geography, commercial law, commercial arithmetic, spelling, commercial forms, general business practice are other subjects offered in as many schools, and with no uniform arrangement.

Fully 50 per cent of all replies from those having a business course stated that stenography and typewriting were both required when either subject was scheduled. Of the remaining replies most stated that all those taking shorthand were required to take typewriting, but pupils were allowed to take typewriting without being required to take work in shorthand. The per cent of total enrollment in the business courses varied from fifteen to fifty.

Opinions Vary on the Work.

The question as to the desirability of a two-year commercial course was answered almost invariably in the negative. With reference to this point I wish to quote from a few of the letters:

1. "We do not have the two-year course in our department. The board of education talked about one but it was counted out on the basis

that it would not pay, as every one would want the people who have finished the four-year course. Personally, I think they are wise."

2. "We have an arrangement by which all the work offered may be taken in two years, but we do not encourage this plan. Practically no one is taking advantage of the opportunity. Personally, I do not consider such a plan desirable, except where pupils are mature and have had thorough education before taking the commercial course. Even in this case, I think that commercial schools or business colleges are better equipped to give this work in one or two years, and we advise pupils of this class to go to the business college."

3. "We have a four-year course designated 'Commercial Course,' but we allow the boys and girls who think that they have not time to complete a four-year course to take the two years of commercial work designated in the course."

"We do not believe that a two-year course would be satisfactory for the reason that the boys and girls are too young and have not had sufficient training in English to do the work, either as a stenographer or a typewriter. And they have not had the necessary reasoning secured by the study of geometry and higher mathematics or of the sciences. I believe thoroughly in a four-year high school course for any line of work."

The reply of one superintendent, who wrote me concerning the subject of this paper, shows how large a place this course occupies in his system, and I feel it will be of interest. I wish to quote rather fully:

"We use the Gregg System of Shorthand. We have twenty-five typewriters, twenty of which are visible Underwoods and five are visible Remingtons. All are of recent models. Nearly one-half of the students in our high school are enrolled in the commercial course, and of the graduates last year one-fifth were in the commercial course, and this year about one-third. Our enrollment this year is five hundred thirty-seven. In last year's class there were fifty-seven seniors, of whom twelve completed the commercial course, and of this number six were boys and six girls. In this year's senior class there are seventy-five students, of whom twenty-eight are finishing the commercial course, and of these seventeen are boys and eleven girls."

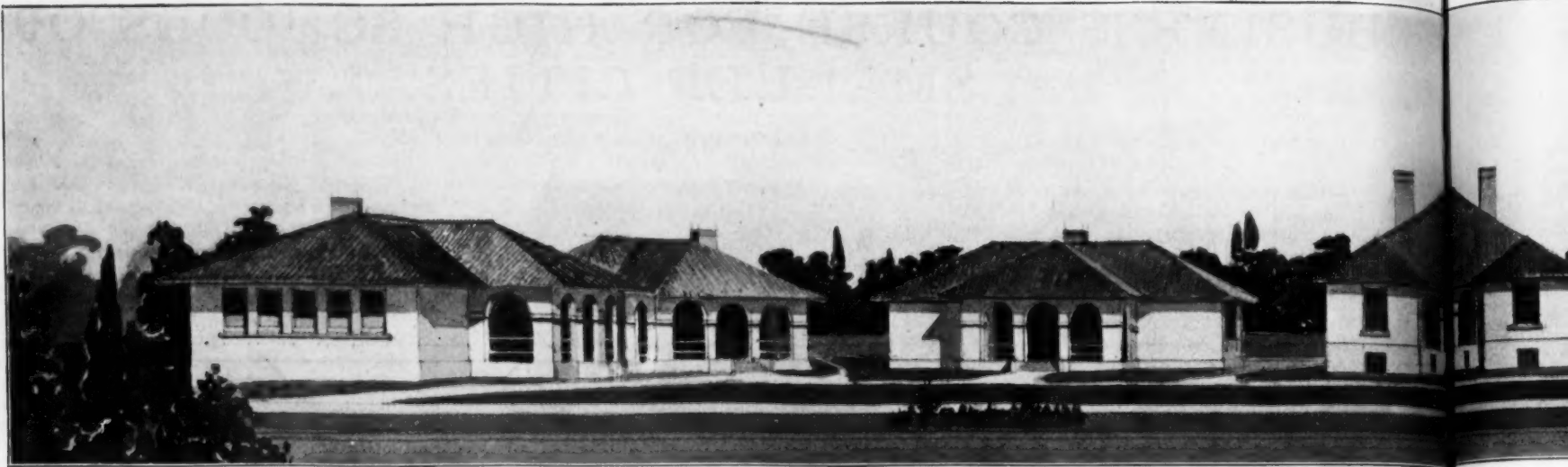
"We consider the commercial course a very

(Concluded on Page 50)

Proposed Business Course for High School in Smaller City

FIRST YEAR.			
First Semester.		Second Semester.	
English	5	English	5
Algebra	5	Algebra	5
Greek and Roman History.....	5	Greek and Roman History.....	5
Business Forms, Spelling, Penmanship.....	5	Commercial Geography	5
SECOND YEAR.			
First Semester.		Second Semester.	
English	5	English	5
Plane Geometry (El.).....	5	Plane Geometry (El.).....	5
Commercial Arithmetic (El.).....	5	Commercial Arithmetic (El.).....	5
History of Commerce.....	5	Commercial Law.....	5
Stenography and Typewriting.....	10	Stenography and Typewriting.....	10
THIRD YEAR.			
First Semester.		Second Semester.	
English	5	English	5
Physics (El.).....	8	Physics (El.).....	8
Modern Language (El.).....	5	Modern Language (El.).....	5
Stenography and Typewriting.....	10	Stenography and Typewriting.....	10
History (El.).....	5	History (El.).....	5
FOURTH YEAR.			
First Semester.		Second Semester.	
English	5	English	5
Modern Language (El.).....	5	Modern Language (El.).....	5
Bookkeeping	10	Bookkeeping	10
Chemistry (El.).....	8	Chemistry (El.).....	8
Algebra (El.).....	5	Solid Geometry (El.).....	5
Civics	5	Economics	5

[Editor's Note—Never in the history of commercial or business courses in high schools have such radical changes been effected as were witnessed during the past four weeks. The course of study proposed by Superintendent Fee is therefore most timely, and should suggest valuable material as a basis for future changes in this direction.]



LILLER SCHOOL, TWELVE-ROOM COTTAGE GROUP, DISTRICT NO. 11,

Cottage Schools of Colorado Springs

Never in the history of the Schoolhouse Department, which has now been a feature of the *Journal* for almost two decades, has an article on any new type of school building or evolution in school architecture, attracted such universal attention as the Cottage School article published in our September issue. In justice to our readers, we here add several interesting illustrations to the matter already published.

It will be recalled that the Buena Vista and the Liller schools at Colorado Springs, Colo., were described in detail. The former was fully illustrated with photographs of the exterior and interior of the buildings. A detailed description of the entire scheme was printed, as one of the most interesting steps in the solution of a problem, which after discussion for a great many years, is nearing perfection in the state of Colorado. Credit should here be given to G. W. Roe, architect, Pueblo, Colo., for the work of the Buena Vista School. MacLaren & Thomas, of Colorado Springs, have designed the Liller School.

In the past all sorts of floor plans and group schemes have been proposed. Well intentioned school board members have spent sleepless nights devising ways and means to erect a fire-proof and noiseless school building. Heretofore, these dreams have rarely passed beyond the architects' drawing board, or the special story section of the Sunday newspapers.

In Colorado, where things are new and men are not tied down to traditions, an experiment has been worked into an actual solution of the

problem. Time will tell whether the buildings are economical, whether coal bills are high, whether children are less nervous and fretful, whether panics and fires are impossible and the like. Everything seems favorable except the heating problem. We will be interested in its solution.

In our September issue we described the general advantages of the Cottage Group Plan. In this present number we show the complete plat-plan of a twelve-room cottage school. It will be noticed from the plan and the front elevation of the Liller school that the grouping of the buildings is very harmonious. Playgrounds are accessible and splendidly placed. The Administration Building forms the center portion of the group and is, as it were, the heart of the school. A moment's study of the plat-plan will emphasize the idea that the Administration Building has been carefully planned and is most complete.

It must be said here that the cottage schools at Colorado Springs have not been erected as a fad or novelty, but come only after mature deliberation. Superintendent Cole pronounces them a complete success and is enthusiastic over the buildings he now has completed. Had the buildings been erected purely as an experiment, the results might not be so satisfactory. However, Superintendent Cole's predecessor, Superintendent John Dietrich, now at Helena, Mont., worked away at the idea for fourteen years while superintendent of the schools at Colorado Springs, and the results are a tribute

to his untiring efforts and a most progressive school board.

JANITORS' PAY.

The Chicago board of education has recently adopted a schedule for the payment of janitors which is interesting as a solution of the difficult problem of equitable pay for work performed under widely differing circumstances. The new schedule provides in its essential features the following:

In buildings having high pressure steam heating apparatus the yearly compensation for heating, ventilation and cleaning shall be determined by computing the area of the structure (outside measurements) and multiplying the same by the number of stories.

In buildings containing less than 20,000 square feet the pay shall be \$1,320 and in buildings containing from 20,000 to 24,000 square feet, \$1,485.

For larger buildings the compensation shall be \$20 extra for each additional thousand square feet of space.

For 81,000 square feet the compensation shall be \$2,480 and for each additional thousand square feet shall be paid at the rate of \$30 per annum.

The yearly salary for five cleanings (scrubbing, working down woodwork and cleaning windows) is fixed at the rate of \$6.25 per thousand square feet. The yearly salary for janitor work is a fixed rate of \$20 for each room used for class or library purposes.

All high schools, the janitor work of which is computed according to the square foot basis, are to be based upon a standard rate of \$13 for each thousand square feet of area.

All cement, concrete, flagged or plank sidewalks, and light courts, connected with the building or buildings, are to be measured in square feet, and on the same shall be calculated an amount at the rate of \$5 a thousand square feet per annum.

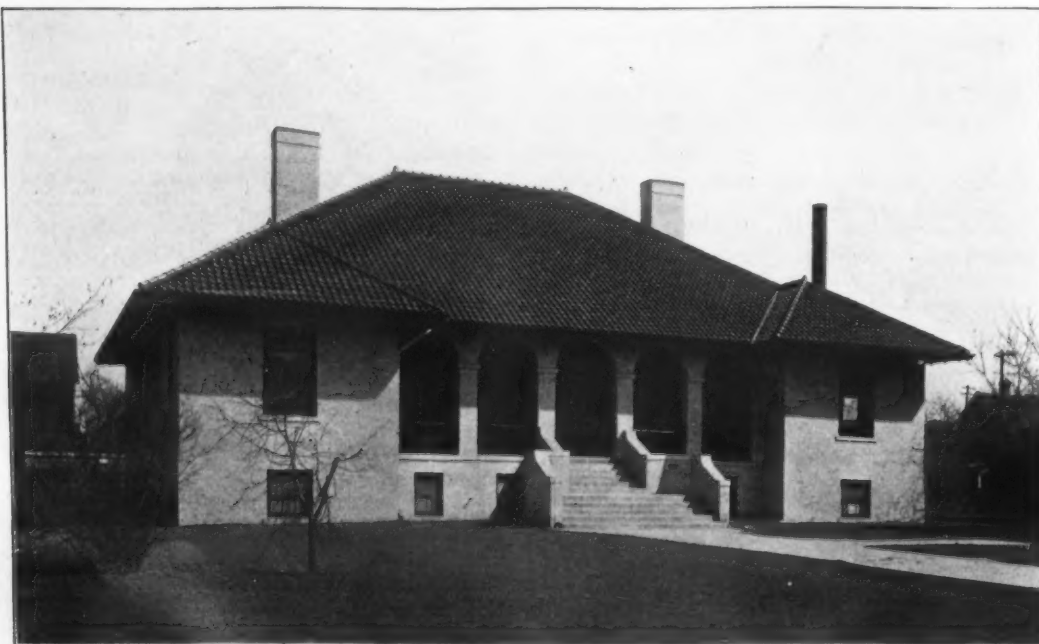
All school yards, whether brick paved, cinders, gravel, sand, dirt or other material, and all school lawns, shall also be measured in square feet (until the maximum of 20,000 square feet is reached) and the same shall be figured at the rate of \$3.00 a thousand square feet per annum.

The compensation for heating and ventilating low-pressure steam and furnace heated buildings is based on a special rate determined separately for each school.

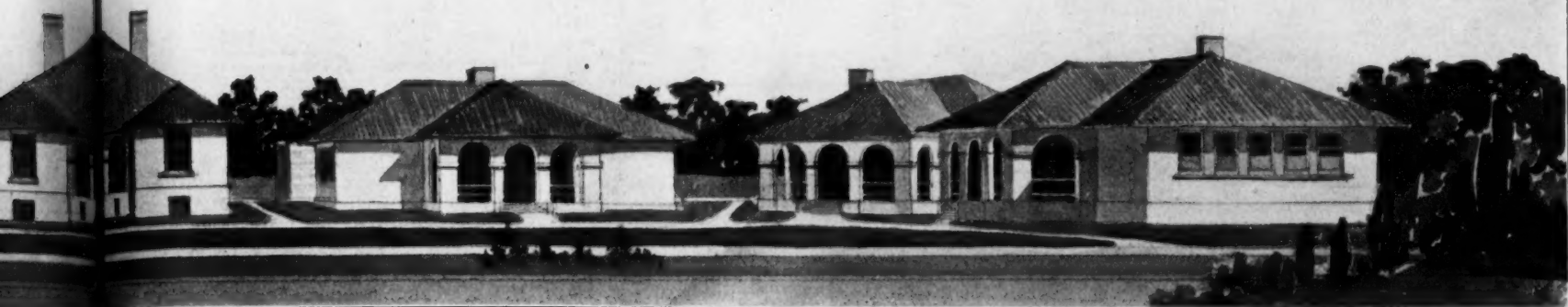
Salaries for extra services, not provided for in the foregoing schedule, are fixed as follows:

Care of manual training rooms, daily per annum	\$18.00
Scrubbing principals' offices, semi-monthly, per annum	15.00
Scrubbing domestic science centers, semi-weekly, per annum	75.00
Sweeping kindergarten rooms, daily, after each morning session, per annum	20.00
Scrubbing kindergarten rooms, semi-monthly, per annum	15.00
Scrubbing pupils' toilet rooms, above basement, semi-monthly, per annum	7.50
Scrubbing principals' and teachers' toilet rooms, semi-monthly, per annum	7.50

(No extra compensation is paid for the extra scrubbing of toilet rooms adjoining principals' offices, nor for kindergarten toilet rooms.)



MAIN BUILDING, LILLER SCHOOL, COLORADO SPRINGS, COLO.



NO. 11,

COLORADO SPRINGS, COLO. (MacLaren & Thomas, Architects.)

PORTABLE BUILDINGS (ON SITE OF MAIN BUILDINGS.)
For the first building, per annum.....\$120.00
For each additional building, per annum... 60.00
(On independent sites.)

For the first building, per annum..... 420.00
For each additional building, per annum... 60.00

DEDUCTIONS FOR CLASS ROOMS NOT USED.
For each class room not in use daily, deduct
a month\$1.66

COMPENSATION FOR EVENING SCHOOL ENGINEERS
AND JANITORS.

In all school buildings, in which evening school
sessions and social centers are held, engineers
shall receive 90 cents an hour, for four hours,
each evening the school is in session.

Janitors shall receive \$1.25 an evening each
evening the school is in session.

Sweeping to be paid for at the rate of 10 cents
a room.

EXEMPTIONS.

The following described buildings are exempt
from the application of the "square foot system"
in the computing of salaries:

Buildings rented by the board for school pur-
poses.

School buildings owned by the board containing
five or less class rooms.

BUILDING AND MAINTENANCE.

Austin, Tex. The school board, because of de-
mands made by the insurance companies, has been
obliged to pay \$104 in premiums for insurance
on the high school. The same must be paid be-
fore repairs begin.

Sacramento, Cal. Bids for coal were submitted
on the basis of 12,500 heat units per ton as re-

quired by the government. Bituminous coal was
purchased at \$9.20 per ton and anthracite at
\$14.50.

The school board of Sacramento, Cal., has creat-
ed the office of architect for the school board. The
work will be that of supervisor of construction and
adviser to the board.

Hornell, N. Y. A large fireproof vault has been
built under the high school for the storing of im-
portant papers and records.

Sacramento, Cal. A recent report on fire in-
surance on the various schools shows that insur-
ance in the past has been distributed lavishly.
Every school was insured for its full value and
five buildings carried more than the structure was
worth.

Some of those cases were: Sutter school, value
\$13,750 and insurance \$21,000; Fremont, value
\$22,800 and insurance \$26,390; Sacramento high
school, value \$149,760 and insurance \$135,000.

It is proposed to do some active work toward
shearing insurance policies. All buildings will be
inspected and the exact amount will be fixed for
each structure.

St. Joseph, Mo. The school board has taken
steps toward a readjustment of insurance. It is
proposed to divide the same between the local
firms represented in the city. A few years ago
the board awarded the insurance to those firms
offering the lowest rates.

Los Angeles, Cal. The school board has under
consideration the erection of fireproof buildings
except in industrial districts. It is expected that
the residences will soon be crowded out of these
districts and the removal of the schools will fol-
low because of the shifting of population. In dis-
tricts where permanent schools are desired the
buildings will be erected of brick.

The school board of Dallas, Tex., has increased
the insurance carried on school property. The
object of placing the additional insurance is to
distribute it among accredited agents in such a
way that the present inequalities will be offset
and that all agents shall receive equal repre-
sentation.

JANITORS.

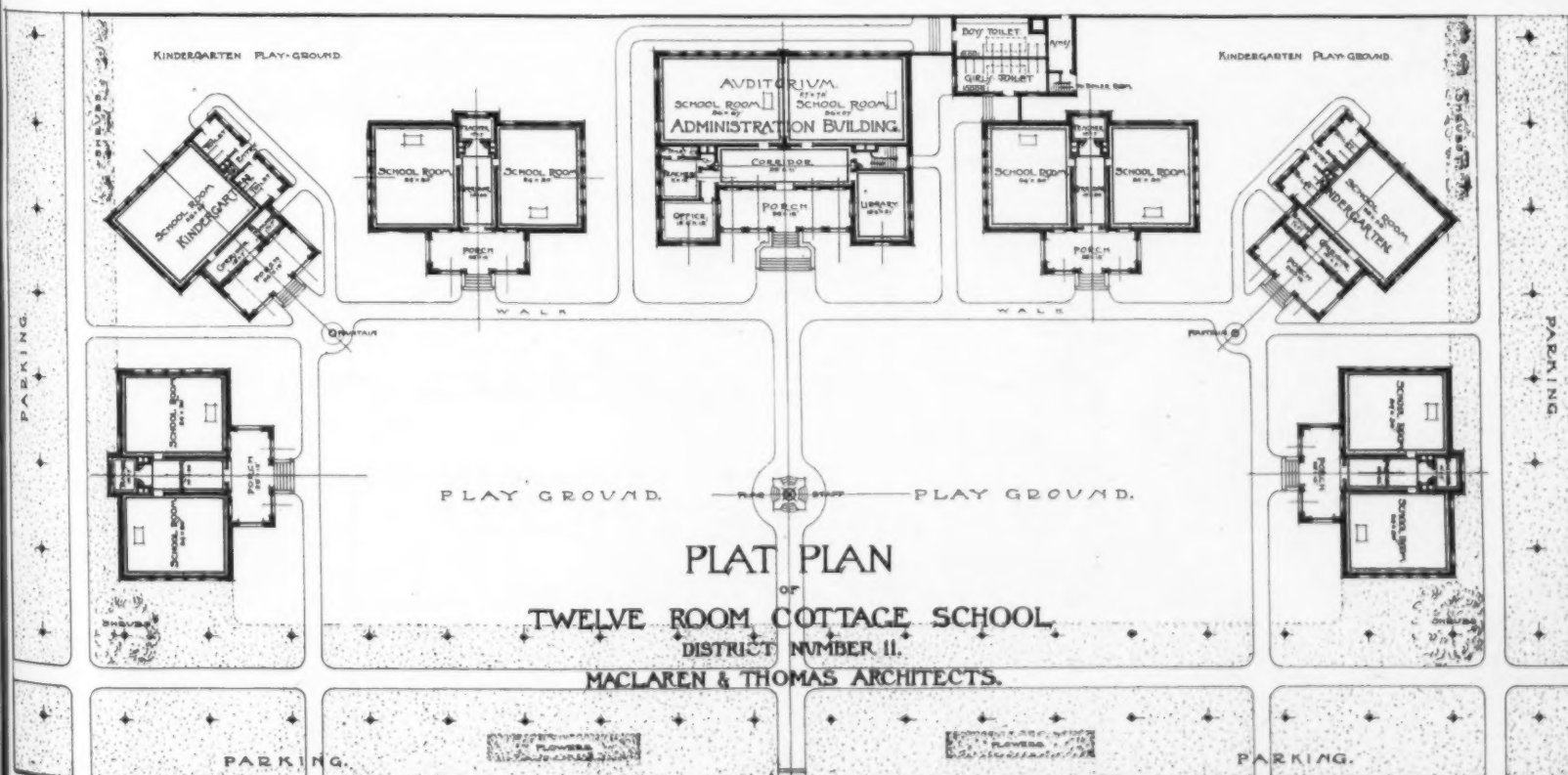
The school board of Des Moines, Ia., has been
notified by the city smoke inspector that all jan-
itors in charge of heating systems generating more
than fifteen pounds of steam must secure engi-
neers' licenses.

The school board of Joliet, Ill., has changed the
name of the janitors to "caretakers." These em-
ployes will be expected to devise means of saving
money, to discover new ideas and incorporate them
into their work. The caretakers are under the di-
rection of a chief engineer occupying the same po-
sition as a chief janitor. It is the purpose of the
board to make the work of the janitorial force a
real factor in saving money and building up the
efficiency of the department through the exchange
of ideas and the holding of frequent meetings.

Cedar Rapids, Ia. The school board has changed
the rules relating to cleaning of buildings. Jani-
tors will be required to scrub floors once every
month and woodwork and windows must be
cleaned every three months.

Open Air Schools.

A recent report of the McCormick Memorial
Fund, submitted to the Chicago health depart-
ment, shows that out of 367 children in attendance
at four open-air schools, 90 per cent improved in
general health, 15 per cent were discharged as
cured and 75 per cent gained in weight.



PLAT PLAN, TWELVE-ROOM COTTAGE SCHOOL, COLORADO SPRINGS, COLO.

Schoolhouse Ventilation and Sanitation

By A. Caswell Ellis, University of Texas.

In planning the heating and ventilating system for a school the following points should be watched:

1. Thirty cubic feet of air per pupil per minute should be admitted to the room.

2. This air should be admitted not lower than eight feet from the floor.

3. This air should be admitted at a speed not to exceed in excess of 400 feet per minute. This requires that the opening for the inlet of fresh air in a classroom seating forty pupils should have about four square feet of clear area.

4. The velocity of the air in the ducts leading to the room should not be over 600 feet per minute. This requires that these ducts should have cross section of not less than two square feet for each classroom seating forty pupils.

5. Each room should have a ventilating duct as large as the fresh air duct, with opening at floor line on the same side of the room and preferably near to the inlet duct for fresh air.

6. Always provide a fan that will produce at least half an ounce pressure and that need not run over 300 revolutions per minute in order to supply the needed air. Fans that run much faster than this consume a disproportionate amount of power and are liable to disturb the classrooms by their noise. A properly planned fan produces no perceptible noise at all in the classroom.

7. The opening through which the fresh air is drawn into the heating chamber should be screened and surrounded by glass and kept perfectly clean. This opening should not be near coal bins or toilet room windows.

8. If the school is in a dusty or smutty location the air should be washed before being blown into the classroom.

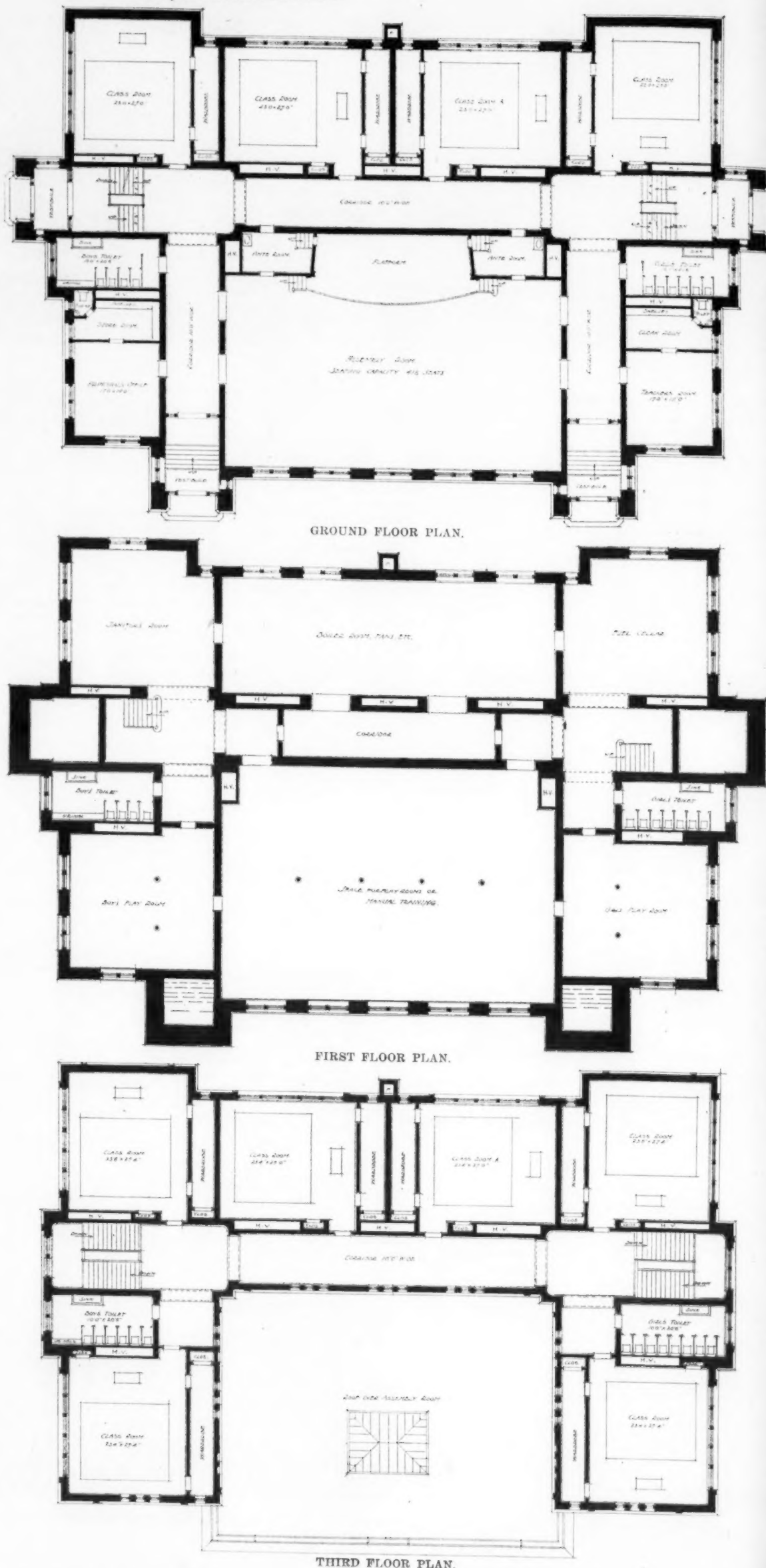
9. An adequate mechanism for moistening the heated air should be provided. I would like to add that I have never seen an adequate mechanism for moistening air in connection with a furnace. The little pots and pans that are usually put on them do not contain one-twentieth the water necessary for properly moistening the air. They are put there merely to appease the school boards. It is of course perfectly possible to provide humidification, but it costs something to do this and so it is usually omitted. Wherever air is warmed it should have water added, as warm air takes up so much more water than does cold air. Air at 70 degrees holds just four times the amount of water per cubic foot that it holds at 32 degrees. Air that is fully saturated at 30 degrees will, therefore, if heated to 70 degrees, have a humidity of only 25 per cent, which is about half as much as it should have to promote health.

Sanitation.

While some of the matters pertaining to sanitation of the school are too complicated to discuss in an article of this kind, the main features are comparatively simple and can be reduced to a very few rules:

1. Make all floors of close-grained hardwood or of rift sawed pine. Rub into the floors as soon as laid two coats of boiling linseed oil in which

FLOOR PLANS
PUBLIC SCHOOL No. 1
TROY, N. Y.



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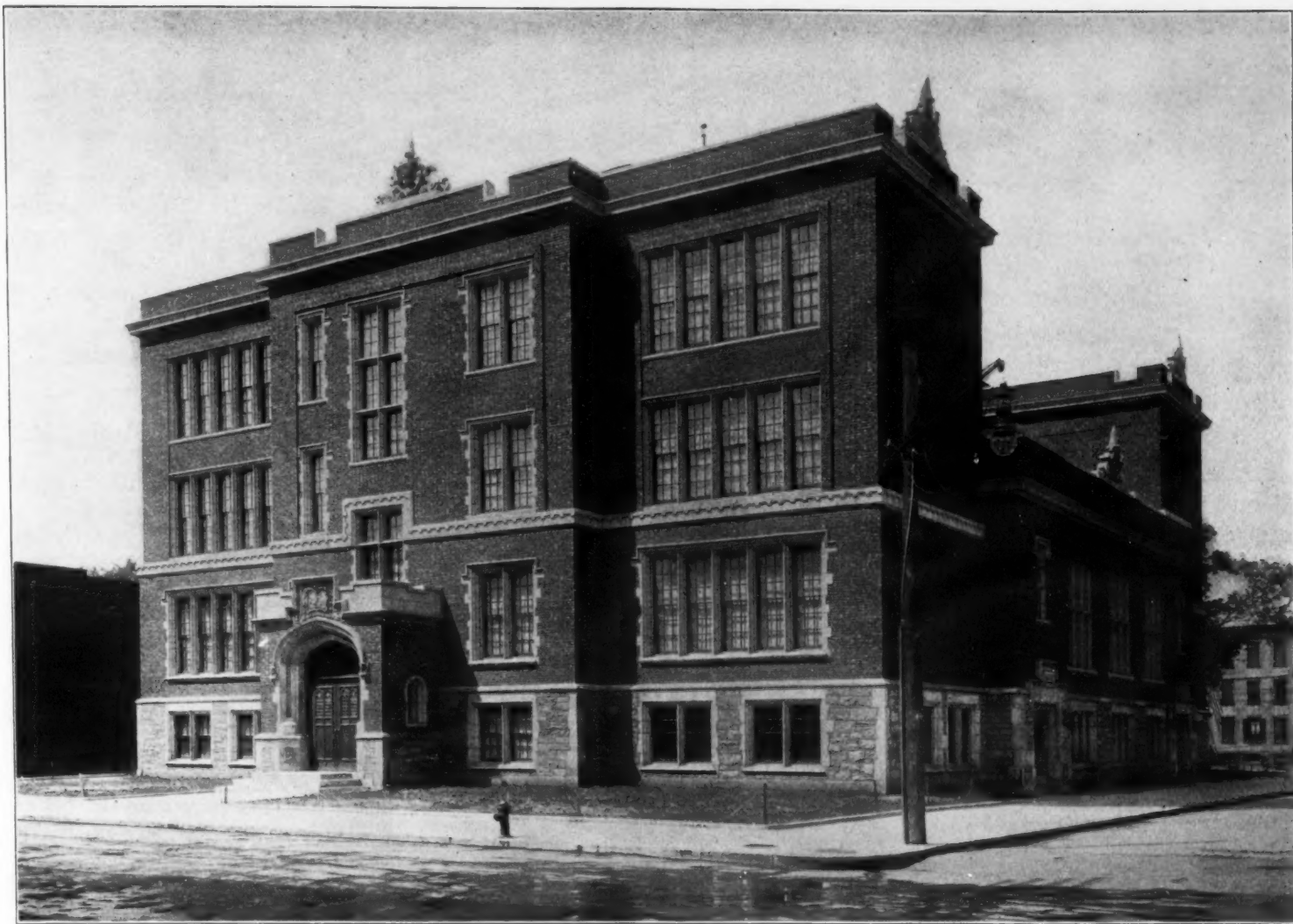
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PUBLIC SCHOOL NO. 1, TROY, N. Y.
M. F. Cummings & Son, Architects, Troy.

one pound of paraffine per gallon is dissolved. Be sure to have the oil boiling hot when applied. Ordinary straight sawed pine floors, no matter how good quality, soon splinter up and are utterly insanitary. The rift sawed pine does not splinter, will wear twice as long, and, with its pores filled with hot boiling oil and paraffine, will not crack open or harbor germs. It is easily cleaned and looks well.

2. Make all interior woodwork without unnecessary flutes, grooves or angles. The fluted or beaded ceiling and wainscoting are entirely out of place, as well as the much decorated washboard and blackboard frame. The washboard should be a plain board with plain beveled top. A cement dado should take the place of the wooden wainscoting, and the chairboard should be a plain five-inch board with rounded or beveled edges. Door and window and blackboard frames should be without flutes and with as few angles as possible. The ceiling should be perfectly plain, whether of wood, plaster or steel.

3. Make all chalk rails with sanitary woven wire eraser rack.

4. Make all walls smooth but not glossy and paint with washable flat paint in light tans or greens or grays.

5. Ventilate all toilet fixtures directly through the roof, and ventilate all toilet rooms directly through the roof.

6. Place no outlet flue for fresh air directly in a toilet room, but, for ventilating a toilet room discharge the fresh air under pressure in an ante-room and provide inlets from this room into the toilet rooms, and provide suction in vent duct from the toilet rooms, either by fan or by stack heater. Never allow vent from toilet room to discharge into attic or into another vent coming from a classroom. Toilet vents are usually best built into the smokestack of the heating plant.

Rules for Janitors.

No better evidence of the widespread efforts which are being made for sanitary school conditions can be found than in the recent attention to janitor service. And, while it is generally appreciated that upon the energetic, faithful character of the janitor will depend the cleanliness of a schoolhouse, much improvement can be made possible by well-arranged, comprehensive rules.

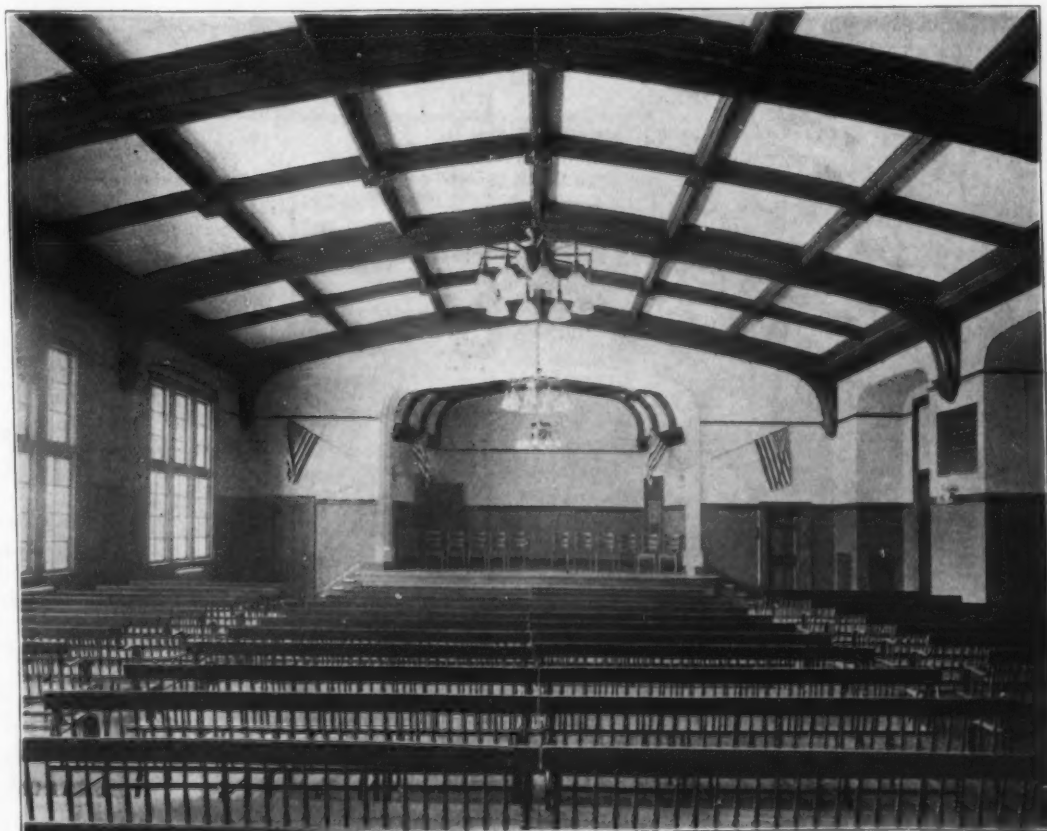
The study of methods in a number of cities and long observation locally are embodied in a carefully prepared set of regulations recently completed by Mr. Donald Dushane, superintendent of the Madison, Ind., public schools. They contain many points worthy of general acceptance:

Immediately before the beginning of school each fall the janitor of each building shall scrub out

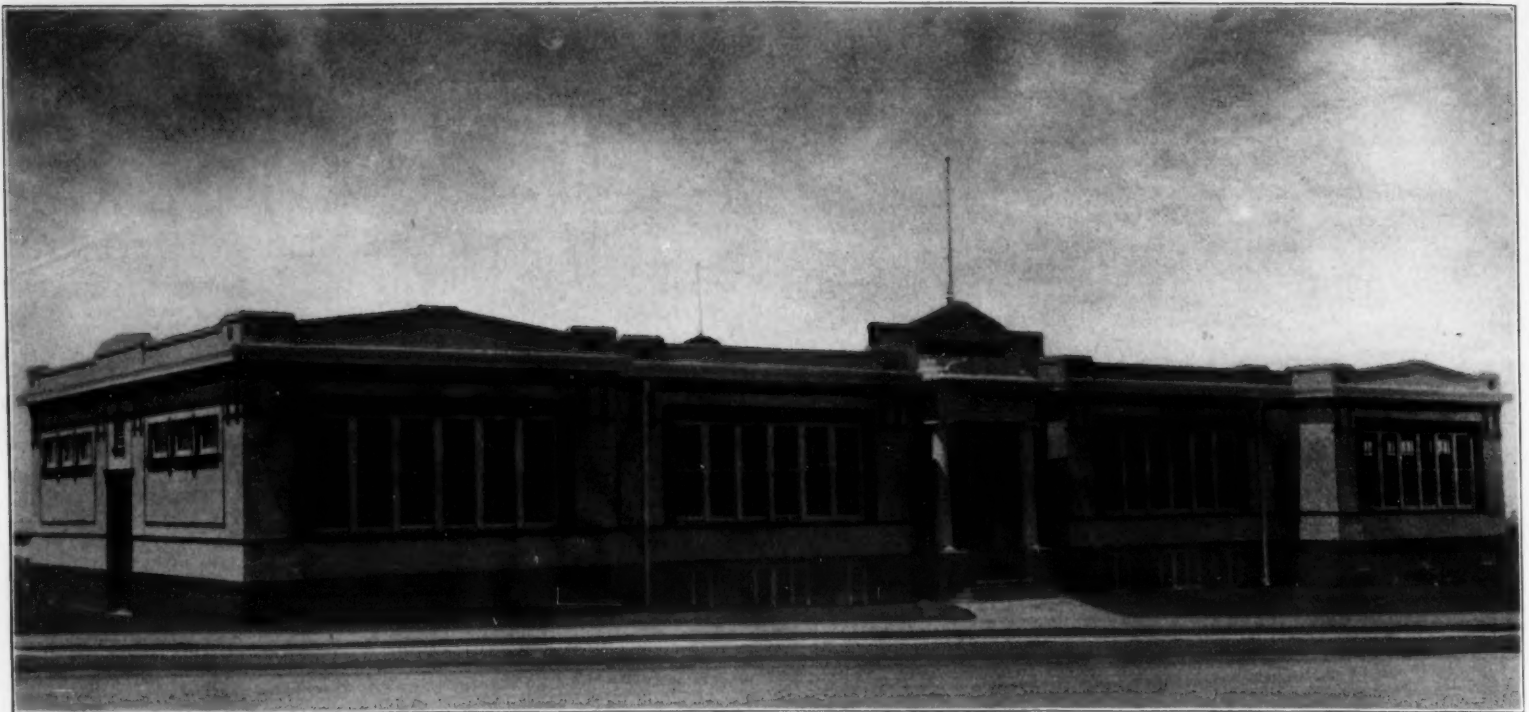
the water closets, sweep the floors and stairs, dust the walls, scrub the floors and stairways, wash the windows, wash all woodwork, including seats and desks. After all this has been done he shall fumigate each room in accordance with the rules of the state board of health.

He shall fumigate the building during the school year whenever so directed by the superintendent.

He shall stow away the coal and kindling before the school opens each year, and at other times when necessary.



ASSEMBLY HALL, PUBLIC SCHOOL NO. 1, TROY, N. Y.



HERMOSA BEACH SCHOOL, HERMOSA BEACH, CAL.

After the close of school each day the janitor shall sweep all rooms, vestibules and halls, dust the desks, seats, other furniture and window sills, and clean out the chalk troughs. If he so desires, the dusting may be done before 8 a. m. Each day he shall scrub the fixtures in the toilet rooms. He shall keep a sufficient supply of toilet paper in every closet. He shall keep all lavatories supplied with soap and shall see to it that towels are changed daily or oftener if necessary. It shall be his duty to securely lock and fasten all windows and doors at the close of each school day. He shall properly clean the filter daily.

The janitor shall attend to the ringing of the bells as directed by the principal. He shall attend to the removal and resetting of all desks and furniture at the request of the principal or superintendent.

The waste baskets shall be emptied daily. Any waste of supplies so discovered shall be reported to the superintendent.

When necessary, it shall be his duty to water and mow the grass, cut the weeds, sweep the sidewalks and curb, care for the trees, shrubs and flowers, rake and otherwise care for the play-

ground. He shall keep the steps and walks free from ice and snow.

Janitors shall scrub all floors and stairs and wash all woodwork once a month or oftener if necessary. The windows shall be washed outside and inside three times a year, first, immediately before the opening of school; second, during the Thanksgiving vacation; third, during the spring vacation. They shall be washed inside at such other times as may be deemed necessary.

Once a month or oftener if necessary he shall clean the inkwells. Whenever necessary he shall wind and regulate the clocks or clock systems. The blackboards shall be washed once a week or oftener if deemed necessary. The erasers shall be cleaned once a week or oftener if necessary. The inkwells shall be filled once a week.

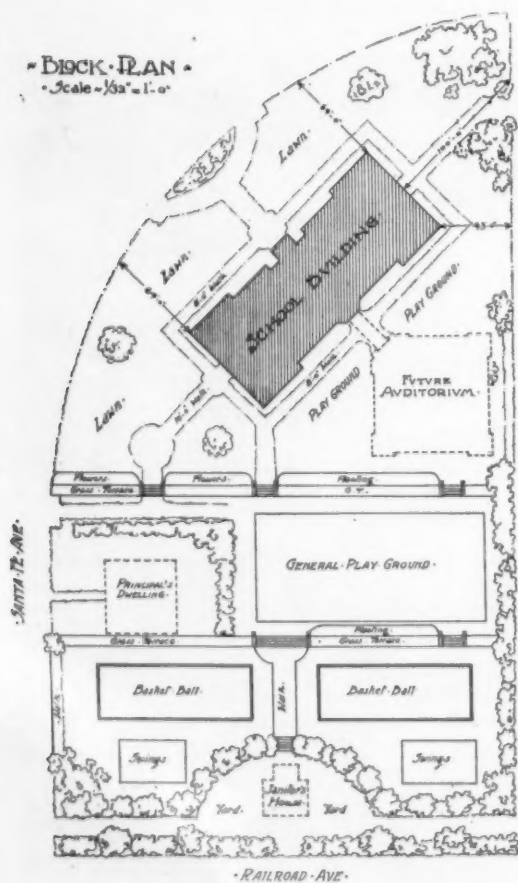
The janitors shall make the fires at such a time as to have the rooms well heated by eight o'clock a. m. of each school day, and until four p. m. shall maintain the temperature at or about 68 degrees F. In addition the office of the superintendent shall be properly heated Saturday morning from 8 to 12, and Saturday afternoon if so requested by the superintendent.

He shall keep the furnaces clean, shall remove the ashes from the furnace daily or oftener if needed. He shall keep the ventilating system in good order. He shall report any defects in the heating system or any other defects to the superintendent promptly.

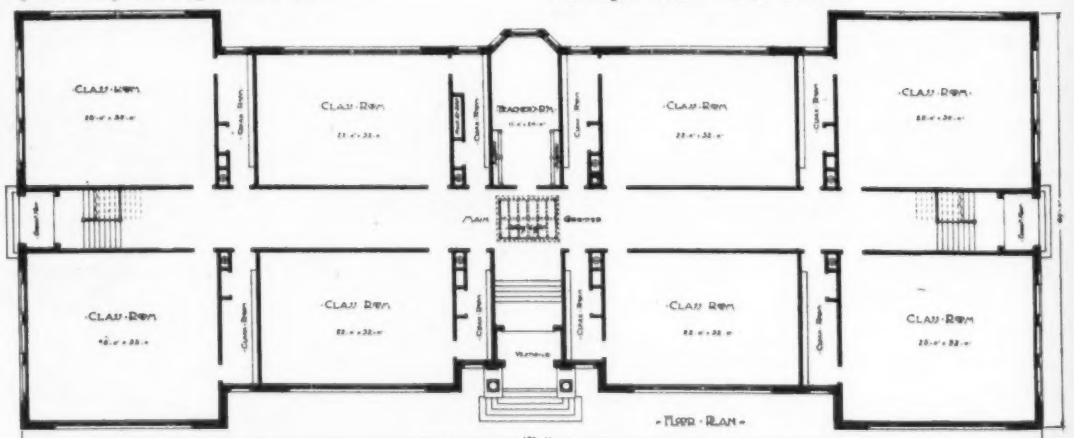
Before the close of school in the spring he shall thoroughly clean the heating and ventilating plants and shall put them in good condition for the summer. Before leaving the building in the evening he shall see that all fires are safe. He shall make frequent observations of the thermometers. During cold weather he shall keep sufficient fire in the building to prevent the freezing of any of the steam or water pipes or plumbing.

He shall make such repairs as do not call for skill beyond his capacity. All such repairs and all repairs that are needed, but that he is unable to make, he shall promptly report to the superintendent. He shall perform work at other school buildings than at the one where he is regularly employed if so directed by the superintendent or board of education. He shall do all painting, whitewashing and varnishing required of him by the superintendent or board.

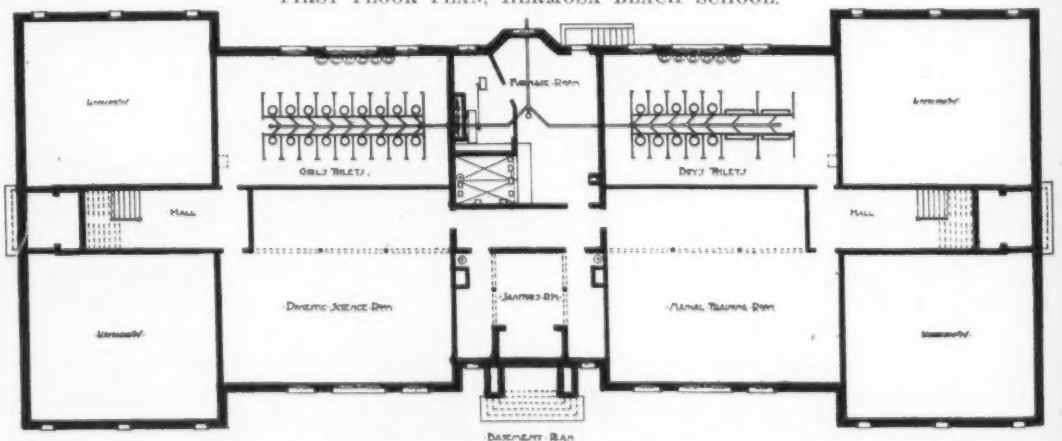
BLOCK PLAN, HERMOSA BEACH SCHOOL.



BLOCK PLAN, HERMOSA BEACH SCHOOL.



FIRST FLOOR PLAN, HERMOSA BEACH SCHOOL.



BASEMENT PLAN, HERMOSA BEACH SCHOOL.

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At the request of the principal he shall see that no school children are kept out of the building when exposed to inclement weather.

Excepting from 10:45 a. m. to 11:45 a. m., the janitor shall not leave the school grounds, unless on school business, with the permission of the principal or superintendent. He shall have charge of the children who remain in the building or on the grounds during the noon hour, and before 8:30 a. m. He shall keep all fire-escapes clean and clear at all times and shall keep all outside doors unlocked during school hours.

Under the directions of the principal he shall assist in the care and regulation of the students in the basement, toilets and yard.

He shall bring supplies and reports from and to the office of the superintendent when so directed by the principal, provided that, except in emergencies, he shall not be so sent over twice a week. He shall at all times be under the jurisdiction of the principal and of the superintendent and shall be ready and willing to carry out their requests and directions. Principals shall report promptly to the superintendent any failure on the part of the janitor to properly perform his duties. He shall check up all receipts of coal and other supplies received by him and shall report all shortages and defects to the superintendent. He shall make such reports as are required by the superintendent or the board. In no case shall the janitor purchase supplies except on written order from the superintendent as authorized by the board.

Whenever exercises are held in the building the janitor shall be present and shall have the rooms used properly heated and ventilated and shall see to it that all windows and doors are properly locked and secured thereafter, unless otherwise directed by the superintendent. For any exercises held in the building that are not school affairs the janitor shall be given extra pay by the parties using the building. The amount of such pay is to be determined by the superintendent, with the approval of the board. He shall exclude all persons making disturbance or loitering on the grounds or in the building.

The janitor shall be subject to the superintendent and principal and shall look to them for instructions and directions.

In addition to the above regulations he shall do whatever is necessary to keep the building and grounds in clean and healthful condition.

The word necessary as used in these regulations means necessary in the opinion of the principal or of the superintendent.

Worcester, Mass. The school board has changed its system of payment of school janitors. They will be paid on the basis of floor space. Sweeping, washing windows, cleaning, heating, ventilation, care of yards and lawns will also be considered when figuring the salaries.

The new schedule will make the cost of janitor service in the high schools \$7,301.42. The cost of the service in one of the grade schools amounts to \$1,628. The janitors are practically made contractors. They will be given the charge of hired help, but are prohibited from violating the state law in regard to overtime of employees.

HERMOSA BEACH SCHOOL BUILDING.

The new Hermosa Beach schoolhouse has been completed recently for a rapidly growing community, which proposes to make its public school a social as well as an educational center. The building shown in the accompanying illustrations will ultimately be surrounded by parked playgrounds, a janitor's cottage, and a public assembly hall.

The building is one story and basement brick building, 170 feet long and 69 feet wide, containing eight classrooms, with cloakrooms and a teachers' room on the first floor.

The basement has a furnace room, a janitor's room, toilets and a domestic science and a manual training room.

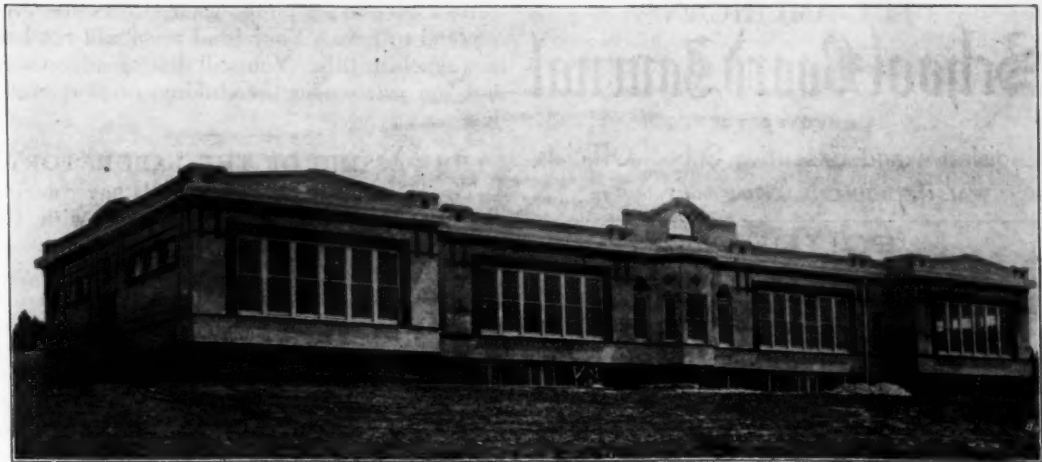
A main corridor is 10 feet wide and runs the full length of the building. It connects at the center with a main entrance corridor 11 feet wide, with entrance vestibules and stairs to basement at each end.

At the center of the building there is a vented skylight, with a ceiling light in main corridor to provide additional light and ventilation.

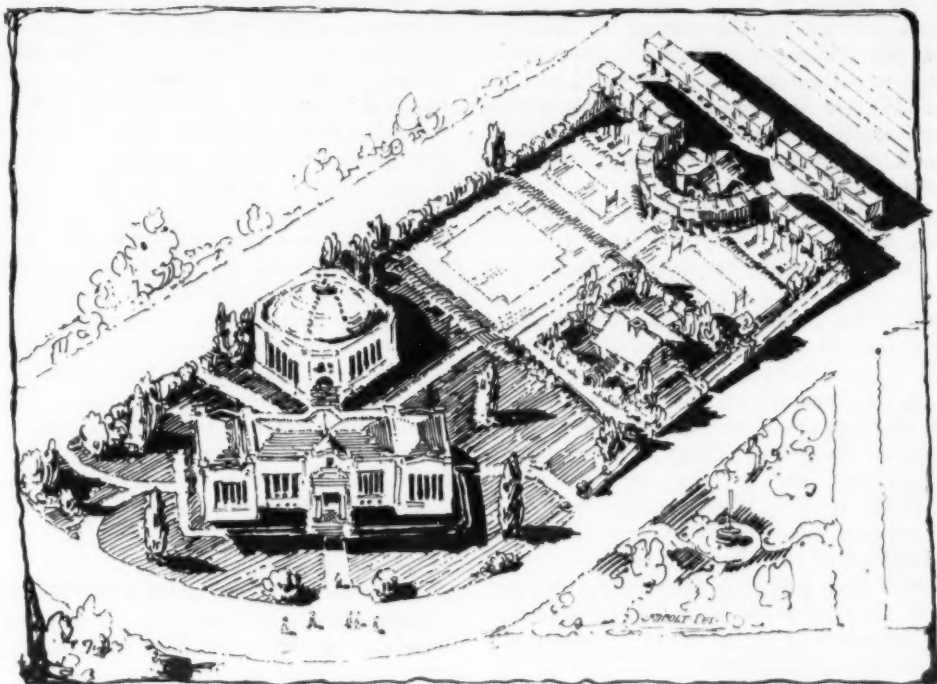
The teachers' room, with its bay window, gives a good outlook over the playgrounds at the rear.

The exterior walls are built of hollow brick, faced with hard-burned, dark-red, ruffled brick for a distance of 6 feet 6 inches above the ground, and plastered above this point with white stucco. The walls below grade are concrete and have been thoroughly waterproofed.

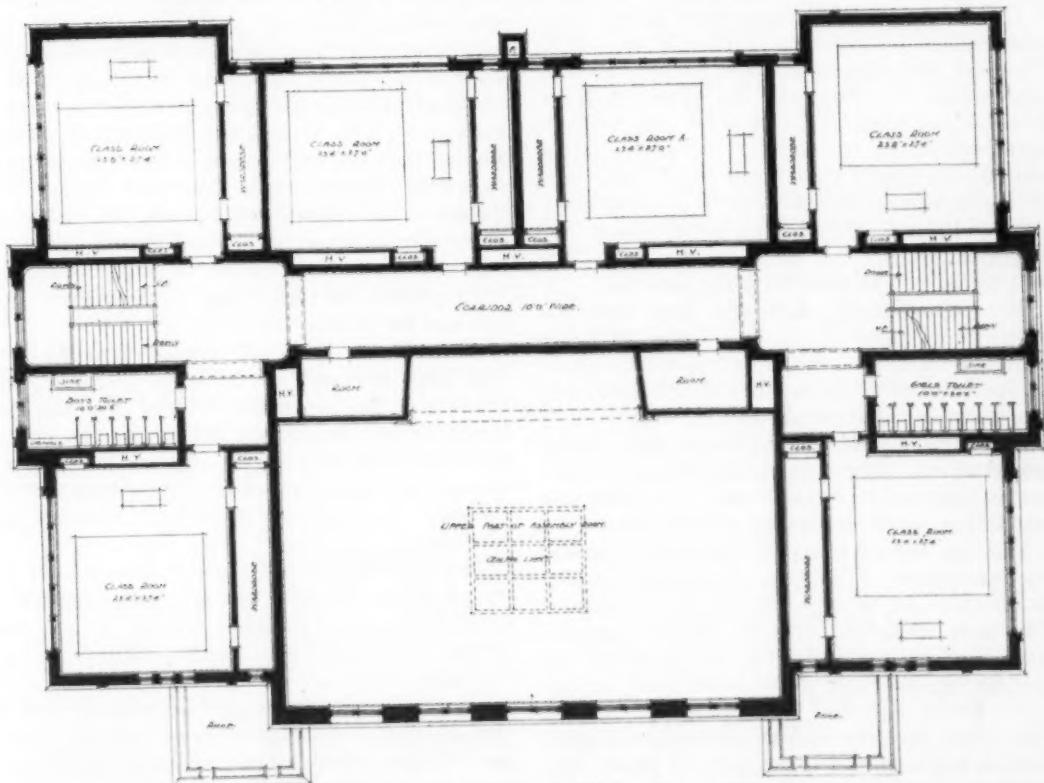
The trimmings around the windows, under the



REAR VIEW HERMOSA BEACH SCHOOL.



BIRD'S EYE VIEW OF THE HERMOSA BEACH SCHOOL AND GROUNDS.



SECOND FLOOR PLAN, PUBLIC SCHOOL NO. 1, TROY, N. Y.

cornice, and all other outer ornamentation are of ruffled brick, which makes a pleasing contrast with the white walls of the building.

The basement floors are of concrete and the first floors are of vertical grain Oregon pine, except the corridors, which have maple floors.

The roof is a four-ply composition, covered with gravel.

The building is equipped with an intercommunicating telephone system and is heated and ventilated by the plenum system.

The cost of the building complete, including architect's fees, was \$23,721 or .79 cents per cubic foot.

The building was designed by Architect L. B. Pemberton of Los Angeles.

THE AMERICAN School Board Journal

DEVOTED TO

Legislative and Executive School Officials

WM. GEO. BRUCE, Editor and Publisher

EDITORIAL

THE TWO-YEAR HIGH SCHOOL COURSE.

In all parts of the country the two-year high school course is coming into its own. The statistics and statements about the number of pupils who enter and complete the work of our secondary schools are having their effect. As some plebeian said recently, "The high school is at last getting down to the people and not aping the college and university."

This is a crude way of putting it. The fact behind the statement will smart those whose devotion to college degrees has been idolatry in a way. We are not arguing against the college and university. After all, our national progress will be gauged entirely by the quality of our thinkers, who will, and must be, college-bred men. A university education is in its last analysis the epitome of all that man has produced in the scientific training of the human mind.

However, the fact remains that for years past we have been slaves to college and university degrees. The scramble for recognition and a place on the "accredited high school list" has been at the expense of the unfortunate and unappreciative thousands. Now we are responding to the call, and the two-year high school course is the result. Words printed or spoken cannot express the importance, or establish an understanding of the significance of this work. Give every high school a two-year course and advertise the fact properly, and the attendance in high schools will be increased by more than a million pupils in a year.

EXIT THE "BUSINESS COLLEGE."

During the past few years the so-called "business colleges" have been unusually successful. However, with the concerted effort for improved high school facilities, with the extension of industrial and vocational education, and with the introduction of the special two-year courses, the fall opening of schools has found many even of the legitimate institutions in an embarrassing condition. Already the condensation and cut-price process has been begun. Hundreds will be out of existence in a few months.

More disreputable than ever have been the practices of securing pupils. House to house canvasses have been made by practically all of the institutions. Poor families have been tricked into contracts they would gladly break if they dared. The commission solicitors have disappeared whence they came, usually from the scum of the large cities, to pass into other damnable occupations until the spring of next year.

You, Mr. School Board Member, and you, Mr. Superintendent of Schools, are responsible for the existence of the so-called "business colleges." You have neglected an opportunity. Again, another of limited education and breeding has seen an opportunity. Now is the time for action. Don't advertise your purpose. Merely make your business courses part of your vocational training and then turn out pupils who can do the work.

Make the head of every business or commercial department the manager of your own employment agency. Train your local businessmen to telephone to the high school for a bookkeeper, a clerk or a stenographer. Today, the average businessman hesitates to poach on your sacred grounds. He wants employees with brains and the average "business college" with no brains

cannot give to its pupils what it does not even pretend to have. Your local press will not help you much in this. You will destroy advertisers, but you will render the children of your city a lasting service.

THE PASSING OF THE LABORATORY.

The laboratories in high schools have, during the past few years, not kept pace with the progress of manual arts' departments or vocational education. Some there are who will differ with this statement. The fact remains, nevertheless, that while there has been a healthy growth, the progress has not been commensurate with other and similar studies. In many sections of the country laboratories have been abolished, or so changed as to be new in form and object.

Taking the work of the laboratory as a whole, it has simply been for the most part a slavish adherence to the dictates of the universities and colleges. Such and such work has been prescribed. The superintendent of schools has bowed his head to the mandate. The school board has known no better than to obey. It has not been all wrong, but the light of a new way is beginning to penetrate the darkness.

We will soon abandon these lavish equipments to introduce a new course of study. This will be a cross between what we now have and what the new vocational education, especially agriculture and domestic science, demands. Our present day laboratory will soon pass away. Part of it will be reserved for the students in the classical and college departments. Even for these, more practical work will be introduced, to arouse the interest and enthusiasm which has so long been lacking. While the passing may be slow, it will be sure, nevertheless, and interesting in the extreme.

NORMAL SCHOOL EXTENSION.

Every state maintains one or more normal schools as an important part of the school system. The training of teachers in these institutions is a logical development of the theory of public education in a republic. It also emphasizes the fact that teaching requires training, specialized knowledge and skill which can only be developed by special attention to and study of teaching methods and principles. The states are yearly raising the standards of teaching, so that the children may not be entrusted to young experimenters but come under the guidance of trained instructors who have a knowledge of their nature and growth and can supply the right instruction to best develop all their powers and give them a preparation for life and for living.

Although the field of normal education is very important only a very small proportion of teachers in the elementary schools have had the benefit of its advantages. In the smaller cities and more especially in the country the proportion of instructors who have only a high school training supplemented by a brief institute is very large.

This condition is quite generally accepted as the great hindrance to the more rapid improvement of rural education. Its causes may be sought in the small wages paid country teachers, the short duration of the yearly terms, and the ever present lack of teachers. The young woman who expects to go into the average country school cannot afford to spend two years in a distant normal school incurring the large expenses that this attendance entails.

Normal school authorities who are alive to the situation feel that a remedy should be promptly looked for and that the normal schools should widen their activities until they reach every prospective teacher in their respective territories.

A number of states have seriously studied this

problem and have sought the solution in the development of county training schools where normal instruction is an important part of the regular two- and four-year courses. Others have through subsidies to regular city and village high schools encouraged the introduction of special courses fitting for country school work. Summer schools of six or eight weeks' duration have successfully replaced the old institutes in several of the most progressive commonwealths and by judicious distribution have enabled a large proportion of present and prospective teachers to obtain at least a grounding in first principles.

The Illinois normal authorities are at present studying a plan for correspondence work by which they hope to reach practically every school in their state. They intend to bring the normal school to the teacher, especially where she cannot come to take residential work. The mail instruction is to be supplemented by Saturday classes in conveniently located centers and by summer work. The plan has large possibilities and should receive a hearty welcome and a fair trial. A number of universities have proved the value of correspondence instruction, but none have seemed so practical or have brought such valuable help to even a small proportion of the schools.

SCHOOLHOUSES AND MUNICIPAL ART JURIES.

While municipal art juries are comparatively new as a feature of city administration, they have almost without exception justified their existence. Their labors in such large centers as New York, Boston and Chicago have been chiefly in the direction of putting order and harmony into urban beautification and in setting standards in the design of buildings, monuments and other public works.

While students of municipal economics are generally agreed as to the function of art commissions, there is much difference of opinion as to the powers which should be conferred upon them. There are those who would make the commissions merely advisory, with no further duty than that of inspecting plans for projects in hand and advising the acceptance, improvement or rejection. Others would grant an arbitrary power of approval or disapproval to which every branch of the city administration must bow. The latter plan has worked especially well in New York City, where the Art Commission, backed by absolute powers, has taken a most friendly and helpful attitude and has won the respect and co-operation of all the city departments.

The idea of municipal art commissions has not been accepted without some friction. While the average city official is willing to accept the judgment of such a jury, the boards of education have been inclined to assert their independence and to hold themselves aloof from any oversight over a branch of their work. Their position has invariably been that of officials who are governed by state laws and are responsible to the state. While they have undoubtedly been justified by a strict interpretation of the laws applying in each particular case it would appear that some art jurisdiction over the schools in any city is desirable.

The schoolhouses of any city are, as we have frequently pointed out, essential to the artistic aspects of communities, exercising an influence upon their citizens by their beauty and attractiveness and moulding to an appreciable extent the ideals of the growing generation. School buildings should be suggestive of the purpose for which they are erected and should be sufficiently impressive to give pupils an idea of the dignity and stability of our form of govern-

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ment. It is useless to teach art in surroundings which are incongruous and ugly and to speak of the greatness of the American republic in cheap, shoddy buildings which represent to children the embodiment of the branch of the government with which they come into contact.

School boards should not be swayed by a false dignity of office in deliberating on their relations to art commissions. They should rather join forces with the latter to give their cities something new and effective in the way of school buildings. The legal relations should be adjusted amicably and disinterested co-operation should be sought for the good of the city as a whole and the school children in particular.

SOCIALIST SCHOOL BOARD MEMBERS.

Socialists who are members of the political party adhering to the doctrines and practices of Socialism, are, as a rule, very poor school board members. In a great many cases good men are elected for membership on school boards whose fitness for office cannot be questioned. However, the practice of forcing all problems to be presented to the "referendum," without giving the individual member personal expression or freedom of action, is absolutely bad.

In Pennsylvania, recently, four members of the school board were expelled from the Socialist party for failure to abide by the decision of the "referendum." The party "bosses" after election expect Socialist members to vote solidly on every proposition. It is assumed that the "bosses" understand every school board problem and can decide. The assumption is most ridiculous and makes the Socialists the worst influence which has crept into the administrative organization in many years.

Recently a Socialist was elected to a school board in a large city. An old member of the school board and a personal friend for years welcomed him. In due time, when the annual election was called, Mr. Socialist came to his friend with tears in his eyes and these words on his lips: "Mr. J., you are entitled to my vote for president. I see the board is unanimous for you. Your many years of service have gained for you this distinction. However, my party has decided I must not vote for you. I must refuse to vote. If I vote for you I will be expelled in disgrace and persecuted for life."

A pretty mess when an American citizen cannot exercise his right of freedom. On school boards, more than anywhere, free action is necessary. Situations change from month to month. We are progressing. When, however, a political party elects members to school boards, with the sword of Damocles hanging over them, it simply imposes a stumbling block and a most embarrassing obstruction against all true progress.

FUMIGATION AND DISINFECTION.

Of course it is absolutely necessary to fumigate schoolhouses as soon as any contagious disease has been discovered in teachers or pupils. It is a wise precaution to fumigate and disinfect all school buildings several times every year on general principles. Disease germs, we are told, are prevalent in every corner of the schoolhouse, especially with the hundreds of children coming from all sorts of homes and surroundings.

A school board recently prescribed rules for janitors, ordering the complete scrubbing of floors and woodwork once a month with good soap and water as a preventive against disease. Unfortunately, this board did not prescribe the washing of everything in all toilet rooms with a disinfectant. This same disinfectant might be placed in all scrubbing and cleaning water, thus assuring the sanitary condition of everything touched by the cleaning water.

Fumigation and disinfection must not be confused. Both are necessary during epidemics. Disinfection ought to be continued all year round. We advise the intelligent use of such disinfectants as have been tested and found efficient. A great many disinfectants are merely useless acid compounds. These should be avoided. Toilets, urinals, washboards, balustrades, laboratory sinks, slop sinks, etc., should be disinfected regularly every week. A little precaution will prevent the violent eruptions so common in almost every state of the Union.

PHYSICAL EDUCATION.

For a great many years the physical side of the child's education has been neglected. Calisthenics has been suggested and adopted as a solution. High school athletics have been encouraged or tolerated, and the girls neglected entirely. Now, however, the pendulum is swinging back. With the progress of medical inspection certain facts have been discovered and discussed, until today we are beginning to realize that the pupil who is physically weak or deficient is not well educated.

And so it is that the month of October finds thousands of physical directors at work formulating courses of study and settling down into the routine of a busy year. A great many school boards have outlined the work to be done. Playgrounds, study halls, gymnasiums, etc., etc., are being worked into the scheme in a most intelligent manner. Of course, a great deal will be neglected. No matter how little is done, something is always better than nothing.

Don't tie the healthy boys and girls down to seats for six or seven months without exercise except the motion incidental to the manual arts classes. From now on your medical inspector will be busy. Keep the blood of your pupils red and there will be but little work for the nurse and the doctor. An editorial such as this should be unnecessary. It is intended merely as a plea for the boy and girl who has given vent to a superabundance of animal life during the past three months and is now growing languid and pale for want of exercise.

LET THE MAN SEEK THE PLACE.

The expression so commonly used by schoolmen is reversed here merely to call attention to the truth and fact behind most situations. The superintendent of schools who sits back in his chair and tells of honors which have been heaped upon him usually has pulled a few wires to start the toppling process in his direction. One out of a hundred places seek the man. Ninety-nine out of every hundred positions are solicited directly or indirectly, and one is usually identical with the other.

And, after all, what is wrong in seeking a promotion? Most of our big schoolmen, today, are pretty good advertisers. There is nothing wrong in this. Practically all of the larger, and the

best of the smaller positions, have been worked for. It is not a question of unsolicited honors, but rather a problem of making good after the contract has been signed.

If a thing is worth having, it is worth going after. The man who beats around the bush never lands the big plum. The superintendent who is not afraid to visit with a school board, discuss questions and allow himself to be examined, is almost always the man who will make good. The man who sits back and waits for a visit from the school board is either foolishly proud or foolishly ignorant. In either case he is undesirable.

There are cases where the position really seeks the man. These are so obsolete that while they appear to be ideal, they should never be taken as a criterion for the really progressive or aggressive man.

SCHOOL BOARD LEADERSHIP.

School boards have a most important duty to perform yearly in selecting the member who shall act as president. Care should be exercised for a number of reasons, but especially because the presiding officer is the highest representative of the city's educational interests and is supposed to speak for the city as well as for the schools.

Not every man who makes an efficient member is fitted to become president of a school board. Mere seniority, leadership of a faction or political party and even devotion to duty are not sufficient qualifications. The ideal chairman must be a man of considerable executive ability, integrity, enthusiasm, force and tact. He must be thoroughly interested in education and must possess considerable information on local school, industrial, civic and social conditions. Above all, he must be willing to make big sacrifices of time and must be ready to take up burdensome responsibility without hope of remuneration or thanks.

Rarely are such qualifications all to be found in a single individual. The members should, however, keep them in mind in their elections and honor only the man who will best perform the duties of the high and honorable office.

A SENSIBLE DOCUMENT.

When the average citizen of Connorsville, Ind., receives the catalog of the schools issued by order of the board of education, he will find himself in possession of a most complete statement. He will be surprised to find it very easy to read and understand. As a rule, reports are not interesting and can only be read with difficulty.

Superintendent G. M. Wilson is to be complimented on this document. The report covering the work of the schools from 1907 to 1912 is just a little different than the average report. It is a distinct pleasure to discover that Supt. Wilson has issued his report not for the teachers, not for the board of education, not for the state superintendent of schools and not for his fellow superintendents, but for the citizens of Connorsville.

SMILEY MOVES UP.

William Henry Smiley, principal of the East Denver High School since 1892, succeeds Dr. C. E. Chadsey as the superintendent of schools in Denver. The vote of the board was unanimous. Mr. Smiley is splendidly equipped for his work. After a long career as a most successful educator he steps into an office he will fill completely. Congratulations to Mr. Smiley, not forgetting the board of education, which should be doubly congratulated.

AN EXCELLENT SELECTION.

The selection of D. J. Kelly, as superintendent of schools at Binghamton, N. Y., is excellent.



Cincinnati tries to elect a successor to Supt. Dyer

THE BOOKS OF THE MONTH

Commercial and Industrial Geography.

By Albert G. Keller, Yale University, and Avar L. Bishop, Sheffield Scientific School. 357 pages. Price, \$1. Ginn & Co., Boston.

A diagram found in the first chapter shows that a workman spends one-half his income for food, one-sixth for clothing, one-sixth for shelter. These three constant and pressing needs form the basis of the text. A brief review of the industrial regions of the world develop the idea of division of labor and the necessity of commerce.

It is shown that every part of the civilized world is dependent upon other parts. Differences in needs, caused by differences in environment, are noted. The marvelous differences between the past and the present, in tools, machinery, modes of working and living, are made vivid in text and illustrations. Matter, style, scientific development of the subject render this book most valuable for grammar and early high school work.

Composition Book by Grades.

Fifth year, by William J. O'Shea, New York City and Andrew E. Eichman, Brooklyn. Illustrated. Cloth, 87 pages. Price \$0.24. Charles E. Merrill Co., New York.

Composition Book by Grades.

Sixth year, by William J. O'Shea, New York City, and Andrew E. Eichman, Brooklyn. Illustrated. Cloth, 87 pages. Price \$0.24. Charles E. Merrill Co., New York.

Here is the plan of work in these books for three lessons of thirty minutes each, per week. A short model composition is given in the textbook. In the first lesson the class read the model, talk about its form, reproduce it, first orally, then upon the blackboard. In the second lesson after the class has made an outline upon a subject similar to the one in the first lesson, this outline is filled out. The third lesson is given to corrections by the class and by the teacher, and if necessary, to writing second copies.

The range of subjects in the model compositions is wide. Bits of narration and description with letters take the lead. These are varied by anecdotes, advertisements, historical and biographical sketches. From a mathematical point of view the model is a problem worked out, the similar subjects are problems to be worked out. One cannot write without having something to say, and practice, practice, practice is imperative. A supplementary oral drill is provided for nearly every week, in the school term. These tend to increase pupils' vocabulary and to give accuracy in the use of words. The fitness and variety of these exercises is unusual.

First Year in Number.

By Franklin S. Hoyt, Indianapolis, Ind., and Harriet E. Peet, Salem (Mass.) State Normal School. 129 pages. Price, \$0.35. Houghton Mifflin Co., Boston.

From the concrete to the abstract is a familiar phrase. Its truth is often forgotten, often disregarded. In "First Steps in Number" it has been remembered and regarded. Children count pieces in dolls washing, count splints and blocks, used in building. They first choose, then add the cost of attractive toys. Through measuring for definite ends, the beginnings of linear and square measure become familiar. First steps in fractions are naturally introduced. Devices for learning combinations in addition and subtraction are many and varied. In everything there is genuine work, leading to power and independence in the use of numbers.

Beginnings in Agriculture.

By Albert R. Mann, Cornell University. 27 pages. Price, \$0.75. The Macmillan Co., New York.

This book bids fair to fulfill the aim of its author, "that pupils shall be brought into as close touch as possible with the actual farms, soils, crops, animals and affairs."

The gradual improvement in plants, in animals, in modes of tillage, in modes of living, is told in a style having a distinct literary quality. Numerous attractive illustrations form an illuminating commentary upon the context. The problems at the end of each chapter, however, seem the best of all. These not only call for facts, comparisons, conclusions, but they are suggestive and stimulating.

Japanese Fairy Tales.

Second series. By Teresa Peirce Williston. Cloth, 96 pages. Price, \$0.50. Rand, McNally & Co., Chicago.

It is given to but few to understand the mind of the Oriental. One of these few is Teresa Peirce Williston. An atmosphere of magic and mystery, delightful plots and situations, only faint hints of any teaching moral distinguish these translations.

Charming illustrations in color by Sanchi Ogawa of the Imperial Art School at Tokio, a distinctive cover design by Kyohel Inukai, are Japanese, are Eastern are entirely satisfying.

The Special Class for Backward Children.

An Educational Experiment Conducted for the Instruction of Teachers and Other Students of Child Welfare by the Psychological Laboratory and Clinic of the University of Pennsylvania. Reported by Lightner Witmer, Ph. D., Director of the Psychological Laboratory and Clinic, University of Pennsylvania. 275 pages. Psychological Clinic Press, Philadelphia.

A volume unique in its facts and aims. In the summer of 1911 a class of eighteen children, all of them more or less defective mentally and physically, were taught for six weeks to learn what could be done to help or remove their defects. In the clinic reports the condition of each child, its home surroundings, the characteristics of its ancestry, were minutely stated. A mental and moral diagnosis. Owing to their very poor homes six of these children lived with caretakers who looked after their food, personal habits, sleeping conditions. The nature and degree of their physical, mental and moral improvement was carefully noted and recorded.

The round table discussions were ably conducted by Miss Elizabeth E. Farrell. She dwelt upon the psychology of these children with such force and vividness that the listening teachers recognized they must make a psychological study of each child to deal intelligently with the children under their care. In the United States there are now some 300,000 defective children, some 5,000,000 backward children. This experiment was made to educate teachers, to appeal to those particularly interested in the conduct of these classes, to appeal also to that wider body of people who support the schools—the public who pay the taxes.

It is difficult to express adequately the impression made upon a fairminded reader by this report of a wise and farsighted experiment.

A History of the United States.

By Reuben G. Thwaites, superintendent of the Wisconsin Historical Society, and Calvin N. Kendall, New Jersey state commissioner of education. 471 pages. Price, \$1. Houghton Mifflin Co., Boston.

One of the most valuable things we have seen in a history in many a day comes in Thwaites and Kendall's History of the United States. It is "Recommended Readings" which contains a teacher's list and a pupil's list of history and biography, a teacher's list and a pupil's list of fiction relating to the periods treated of in the text, and a list of books of poetry. We consider this the most serviceable thing we have ever seen in a history. At the end of each chapter there are a set of questions and suggestions, and another set of composition subjects. The history is divided into the Period of Discovery, the Period of Colonization, the Revolution, the Formation of the Union, the Period of National Development, the Civil War, the Period of National Expansion, with an appendix, an index, and a supplementary on The United States Today: The Progress of Half a Century. The value of the work is enhanced by a series of valuable suggestions for teachers on the general use of the book. We strongly recommend this history and especially for its bibliographical value to teacher and to student.

Lippincott's Second Reader.

By Homer P. Lewis, Worcester, Mass., and Elizabeth Lewis. 171 pages. J. B. Lippincott Co., Philadelphia.

Lippincott's Third Reader.

By Homer P. Lewis, Worcester, Mass., and Elizabeth Lewis. 267 pages. J. B. Lippincott Co., Philadelphia.

Fables, folklore, legends, myths, fairy tales, take the lead in this second reader. Their beauty attracts and aids them in indirectly teaching great truths. Children here become acquainted with the paragraph and the simpler suffixes.

Child psychology tells us that at twelve interest in history begins to dominate, biography and pioneer history being preferred. Therefore the introduction of biographical and historical sketches into the third reader is in accord with the latest dicta of this relatively young science. The drill in word-formation continues and games in word-making may now and then be of advantage. The excellence of the paper and type give a fit setting to the fine contents of these books.

A New Nation.

By Charles L. Barstow. 209 pages. Price, \$0.50, net. The Century Co., New York.

Variety, in style and subject-matter mark this volume. Only a bright and cultivated woman could tell the story of the Louisiana purchase as it is here told. "The Last Conquistador" is highly dramatic. Breadth and scholarship appear in John Bach McMaster's articles on the early and public life of Daniel Webster. The chapters upon old Georgetown and pioneer Spanish families give glimpses into picturesque phases of society—now entirely gone—while those upon the Lincoln-Douglas debates take readers into the days of tension preceding the civil war. If all the illustrations are as accurate as those about Mt. Vernon and missions in Alta, Cal., their truthfulness is of a rare type.

Individuality.

By Edward L. Thorndike, Teachers' College, Columbia University, New York. 52 pages. Price, \$0.35. Houghton Mifflin Co., Boston.

This is one of the series of the Riverside Educational Monographs, edited by Henry Suzzallo, of Columbia University. The essay is divided into three parts: The Nature of Individual Differences, The Cause of Individual Differences, and The Significance of Individual Differences. This is followed by an outline of the topics treated.

Fulda's Der Talisman.

Edited by Otto Manthey-Zorn, Amherst College, Amherst, Mass. 16mo, cloth, 239 pages. Price, \$0.45. Ginn & Co., Boston, New York, Chicago.

Through the plan of the author to clothe a modern problem—the divine right of kings—with German romantic garb, this play is said to have marked a revival of romanticism within the most modern drama. It has direct bearing on the conflict in Germany between Bismarck and the present emperor, and yet is free from any traces of disloyalty. The introduction gives a study of the author and a careful outline of the character of the present emperor, and this enables the student to understand the underlying satire. There is a vocabulary and notes of linguistic and syntactical difficulties. The text is edited for use at the end of the first year of college German and for advanced classes.

Explorers and Settlers.

By Charles L. Barstow. 222 pages. Price, \$0.50, net. The Century Co., New York, N. Y.

Similar to the Westward Movement this book of Explorers and Settlers is one of the series of Century Readings in United States History, tales from the Century and St. Nicholas. This series of readers in United States history is intended to vivify with real human interest the narrative which is furnished in shorter histories and textbooks, and the object is attained.

More's Utopia.

Edited by Wm. D. Armes, University of California. 346 pages. Price, \$0.60, net. The Macmillan Co., New York, Chicago.

More's "Utopia" is a perennial source of book-making. There are many editions of this famous work. The latest, and perhaps one of the best and most compact, is that by Professor Armes of the University of California. The basis of the text is taken from the first edition of the first English translation, as reprinted by Dr. Lupton. The spelling of course has been modernized and a few objectionable passages offensive to our modern refinement have been omitted altogether. Aside from the text itself there is much erudition work brought together in this small volume, including The Life of Sir Thomas More, The Early Editions of the Utopia, The Utopia as the First Fruit of the Renaissance in England, The Literary Art Shown in the Utopia, The Purpose of the Utopia, and Ralph Robyson and His Translation. There are an Appendix, Notes, Glossary and an Analytical Index.

The History and Principles of Education.

By Paul Monroe, Teachers' College, Columbia University. Paper, 87 pages. Price, \$0.25, net. The Macmillan Co., New York.

This syllabus of a course of study on The History and Principles of Education, by Paul Monroe, Ph. D., of Columbia, will be found valuable to the student of pedagogics. The text throughout is brief, but the references are abundant and satisfying.



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BUSY SUPERINTENDENTS.

A non-partisan school committee composed of Supt. D. H. Christensen of Salt Lake City, Utah, Dr. Jordan Thomas of the State Agricultural College at Logan, and Supt. E. H. Snow of Washington county, has been appointed. This committee will draft an amendment to the state constitution of Utah to provide that the state superintendency shall be an appointive office and removed from political influences. The committee represents one member of each of the three political parties in the field and the selection was made during the session of the Utah superintendents' convention. The convention also indorsed a resolution to work for the placing of the name of State Superintendent Nelson on the ballots at the next election.

Supt. Charles E. Chadsey of Detroit, Mich., has made the hundred principals and supervisory



M. E. FITZGERALD
Supt. of Schools, Cambridge, Mass.

teachers of the city a private cabinet. He desires to secure greater co-operation between the teachers, and to this end has proposed that there be an exchange of ideas, and that the problems constantly arising be freely discussed and suggestions made. He believes the whole school teaching force can be mutually benefited by the plan.

Mrs. Ella Flagg Young of Chicago, Ill., has emphasized the need of less memorizing in the lower grades and a course of action which will make the advance of grade pupils more rapid. Mrs. Young declares children should be thirteen or fourteen at the time of entrance into high school. At the present time many are fifteen and some sixteen when they reach the higher grades.

Joliet, Ill. The board has delegated to the superintendent the control of teachers, principals and other employees. He has authority to dismiss any person for cause.

Supt. S. L. Heeter of Pittsburgh has announced that demerit marks will be abolished in the schools this year. Formerly a fractious pupil would receive a demerit mark following a violation of rules or a lack of conduct. A pupil receiving twenty-five of these marks in a month was suspended and compelled to appear before the faculty for reinstatement. After three suspensions the pupil was required to appear before the whole board. Supt. Heeter is opposed to the system and believes that a conference between the teacher and superintendent would be equally as effective in improving the conduct of pupils.

Supt. L. W. Mayberry of Wichita, Kas., has made plans for a revision of the examination system. Tests will be given every six weeks in rotation. The superintendent will be the only person who knows the exact time of the test, but teachers will be able to judge the week it will occur. Supt. Mayberry believes the system will obviate the examination grind and relieve teachers of the hard work of marking papers following examinations. The indefiniteness of the date removes the nervous strain on pupils. The work is accomplished in installments, which enables the pupils to complete each examination without the usual weariness.

Terre Haute, Ind. The school board has made the superintendent head of all school departments. The action was due to a clash of authority between the supervisors.

Mr. A. W. Chamberlin, superintendent of schools at Waterloo, Ia., for the past four years, has resigned to engage in the real estate business. Mr. Chamberlin was superintendent at Waukesha, Wis., previous to his election at Waterloo.

E. A. Hotchkiss, superintendent of schools at Ashtabula, O., has been appointed assistant superintendent of schools at Cleveland. The school board of Cleveland, O., has provided four assistant superintendents at a salary of \$3,700 annually.

Mr. Charles W. Cole, superintendent of schools at Albany, N. Y., died at Raquette Lake, N. Y., Aug. 27. He was 72 years old.

Mr. F. J. Brownscombe of Montpelier, Vt., has been elected superintendent at Danbury, Conn. He succeeds Mr. Geo. H. Tracy, who resigned to enter the book publishing field.

Mr. E. C. Willard, superintendent of schools at Stamford, Conn., since 1891, died Aug. 20 at Basin Harbor, Vt., of apoplexy.

The board of superintendents of the New York City public schools has appointed Mr. J. P. Conroy to succeed the late Miss Julia Richman as assistant superintendent, and Mr. Cecil A. Kidd to succeed Dr. Matthew J. Elgas, deceased.

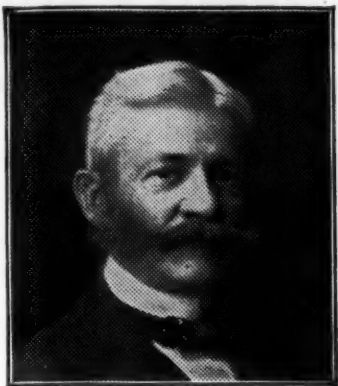
St. Paul, Minn. The school board has delegated to the superintendent of schools the assignments of teachers.

Milwaukee, Wis. Moving pictures in connection with the teaching of geography, history, art and botany have been indorsed by Supt. Carroll G. Pearse.

Supt. Ben Blewett of St. Louis, Mo., has directed that children who have reached the age of 5 years be admitted to the schools in cases where this would not make additional teachers necessary.

Supt. Ella Flagg Young of Chicago has commented on the number of large boys in the upper grades. She is of the opinion that boys are not duller than girls and is inclined to place the blame on the teaching force. She substantiates this by criticizing the practice of referring pupils to the school where they are helped over the difficult places and return to school ready to go on with their classes. Mrs. Young believes that the regular teacher who knows the students in his particular room should be able to do more than the stranger in the vacation school who knows nothing of the pupil.

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EVENING SCHOOLS.

Duluth, Minn. Evening schools have been introduced in three school buildings. Instruction will be free and open to adults as well as minors.

Berkeley, Cal. A night school has been established in South Berkeley.

Tacoma, Wash. Night classes for foreigners, workmen and others have been introduced. The board has appropriated \$8,000 for the conduct of these classes and \$250 for advertising the work.

The schedule of salaries for directors of evening schools in Buffalo is \$4.50 per night; for principals of high schools, \$6; heads of departments, \$4.50; assistant teachers, at the rate of \$2.50 per night for first year of service, \$3 for the second year and \$3.50 for the third year; grammar school principals, \$4.50 to \$5.50 per night; assistant teachers of grammar schools, \$2 to \$2.50.

Montclair, N. J. The school board, in order to secure regular attendance at the night school this winter, has passed a rule requiring a deposit of \$1 at the opening of classes. This deposit will be returned at the end of the term if the pupil has maintained an average attendance of 75 per cent. Those who do not secure this average will forfeit the deposit.

Memphis, Tenn. The school authorities have made an effort to make the night school surpass that of last year. In addition to the academic branches, the course will include bookkeeping, shorthand, typewriting and bench work for boys.

Parkersburg, W. Va. A night school has been established. Sessions will be held three nights a week, which will allow every other night for study.

Boston, Mass. Evening general high schools and evening commercial high schools have been inaugurated in the school system during recent years. Pupils are prepared for entrance into higher institutions of learning and special groupings of studies are made for those who have chosen some particular occupation in which they would like to engage. In the curriculum are found such subjects as ancient and modern languages, ancient and modern history, English composition, literature, penmanship, geometry, mathematics, algebra, physics, chemistry, music, bookkeeping, commercial arithmetic, commercial industry and commercial law, stenography and type-

writing, business organization and salesmanship.

In addition there are evening industrial and trade schools. These classes are composed of pupils who seek to increase their wage and efficiency through a study of processes and parts of their trade with which they are unfamiliar and those trades which are closely allied to their own. The instruction includes education for machinists, carpenters and builders, draftsmen, sheetmetal workers, blacksmiths, printers, lithographers, photo-engravers, illustrators, designers, painters and interior decorators, automobile and carriage builders, patternmakers, etc.

At the evening trade school for women there are classes for work in machine operating, millinery, dressmaking, cutting and fitting, cooking, household management and economics. The classes in the latter are also open to housewives.

Milford, Mass. One thousand dollars has been appropriated for night schools.

McKeesport, Pa. A night school has been opened. The board has also voted to continue the lecture course this winter.

San Francisco, Cal. The board of education has established an evening class for foreigners. Tuition will be provided for Russians who desire to learn English.

Hancock, Mich. Night classes have been introduced in the high school.

The Supreme Court of California has rendered a decision in which it upholds the contention of the state board of education that night schools should not be considered in making the apportionment of school funds. The decision was rendered on the appeal of the attorney-general from a decision given by the Appellate Court. The lower court upheld the contention of City Attorney Long of San Francisco and the board of education of Los Angeles basing apportionment on attendance at elementary and grammar schools only. The decision reduces the income of the Los Angeles and the San Francisco schools.

Pittsburg, Kan. A night school has been established. Classes are open to all between the ages of fifteen and twenty-one who do not attend the day sessions.

INTERESTING SCHEDULE.

Hannibal, Mo. A new schedule of teachers' salaries has been adopted. Teachers are di-

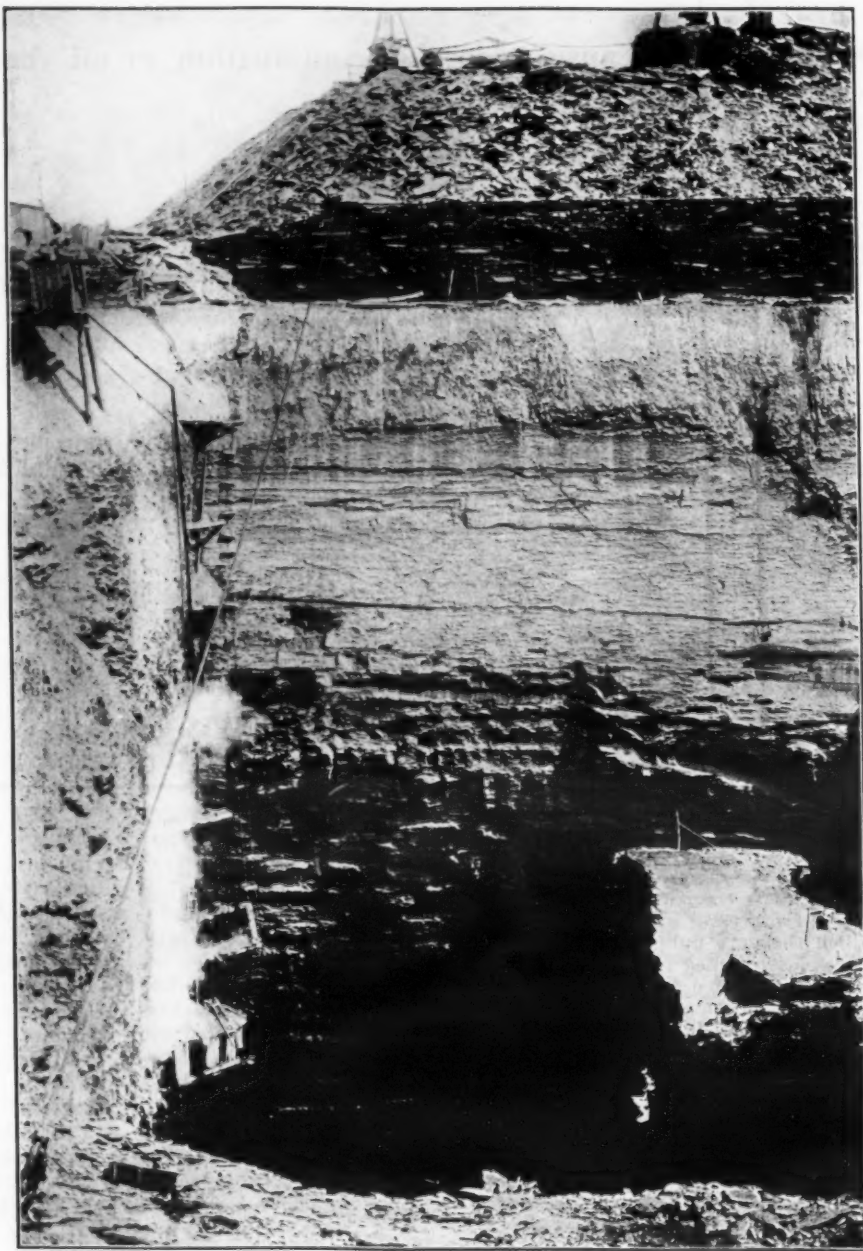
vided into six groups, Class E, those serving the first year; Class D, teachers having taught two to four years; Class C, to include a period of service of from five to nine years; Class B, those who have been in the service ten to fourteen years, and Class A, those serving their fifteenth year. Class AA are elected by the unanimous vote of the board. Teachers in this class must have had summer school work and must attend once each three years thereafter. The salaries for the different groups are as follows:

Class E, first year, \$40 to \$50; Class D, second to fourth years, inclusive, \$45 to \$50; Class C, fifth to seventh years, inclusive, \$50 to \$55; Class B, tenth to fourteenth years, inclusive, \$55 to \$60; Class A, fifteenth year, \$60 to \$65. Class AA, elected by the unanimous vote of the board, \$70.



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Supt. of Schools, Binghamton, N. Y.

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By the Teacher:

Because the writing on slate blackboards can be plainly seen throughout their entire life (but on artificial blackboards only the first few months after installed).

Because slate blackboards are more easily and quickly cleansed.

Because slate blackboards cause no interruption of the teacher's work, no repairs, no reblacking ever being necessary.

By the Pupils:

Because the writing on slate blackboards can be far more easily read and at a greater distance than the writing on any artificial blackboard. (The coloring in the latter is artificial and soon fades, which is not the case with slate).

Because the writing surface of slate blackboards always remains smooth, while the surface of artificial boards scales, peels and wears, causing the boards to become uneven and making their use a source of exasperation.

The necessary wet-washing disintegrates the pulp or plaster of which artificial blackboards consist, and causes them to become gray, making reading from them very trying to the eye.

By the Board of Health:

Because slate is absolutely sanitary and perfectly non-absorbent, hence it offers no lodgement for dust or germs, which thrive in the porous surface of artificial boards under the stimulus of frequent wet-cleansing.

F—By the Parents:

Because they know that slate blackboards will not cause their children the eye strain incident to the use of artificial blackboards.

Because they know that slate blackboards are absolutely sanitary and so decrease the spread of germ diseases.

G—By the School Architect:

Because in specifying slate blackboards he consults the very best interests of his clients, instead of trying to gain their temporary approbation by cutting the first cost to the lowest possible notch, irrespective of the future expense and welfare of the School. An Architect that specifies artificial blackboards can be regarded with suspicion. (1st—As being unfamiliar with his materials. 2nd—As cutting first cost without respect to future cost).

H—By the School Superintendent:

Because natural slate blackboards help him to secure the greatest efficiency from the school system under his supervision, and makes his work easier and better.

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State Supt. Cary of Wisconsin has compiled a list of thirty cities in the state which will receive state aid for continuation schools this year. The cities which have been approved and have made tax levies are as follows: Appleton, \$6,000; Ashland, \$4,000; Beaver Dam, \$2,500; Beloit, \$5,000; Chippewa Falls, \$3,000; Eau Claire, \$5,000; Fond du Lac, \$6,000; Green Bay, \$6,000; Janesville, \$5,000; Kenosha, \$10,000; La Crosse, \$3,000; Madison, \$5,000; Manitowoc, \$3,000; Marinette, \$1,500; Marshfield, \$2,500; Menasha, \$2,500; Milwaukee (3), \$100,000; Neenah, \$2,000; Oshkosh, \$6,000; Portage, \$1,500; Racine, \$7,000; Sheboygan, \$8,000; South Milwaukee, \$2,000; Stevens Point, \$3,500; Superior, \$9,000; Wausau, \$5,000; West Allis, \$5,000; Two Rivers, \$1,500.

Buffalo, N. Y. The Seneca Vocational School is being enlarged this year and four rooms are to be added, making a total of thirteen rooms used by the school. Many of the boys who have taken the vocational courses have found good positions and have received unsolicited promotion.

St. Louis, Mo. Shorter commercial courses have been authorized and plans have been made for the change.

Houghton, Mich. The high school is provided with seven courses of study, four of which will be of a practical nature. The English course has been made very elastic and provides five electives so that any student who desires may take this course and elect desirable subjects from other courses. This change makes it possible for girl students or others who have no need for physics and find the subject difficult and time-consuming to graduate without taking the objectionable subject.

Another feature of the work is the practical nature of those courses which provide four years of manual training or domestic science in addition to a list of carefully selected subjects which will equip the students for the occupations they are to follow.

St. Paul, Minn. Part-time schools for employees of factories and stores, between fourteen and sixteen years of age, will be conducted this year on a much larger scale. A room convenient to factories and stores has been secured and a teacher appointed. Employees have the privilege of attending one hour each day without loss of pay. Teachers are on duty from nine to four o'clock.

Saegertown, Pa. Agriculture has been introduced in the schools.

St. Cloud, Minn. A committee has been appointed to confer with Supt. C. H. Barnes in the preparation of more extensive industrial work.

New York, N. Y. The textbook committee of

the board of education has recommended to the board the creation of special vocational studies for pupils who have reached their sixth year of school. It is pointed out that at this time a great many pupils leave school to go to work. They have not taken any vocational work and are unfitted for any trade or occupation. It is proposed to give academic work along with any vocational subjects they may select so that if the pupil does not find himself fitted for a trade he may return to take high school work. By following such a plan it is expected that a great many pupils will stay in school longer who would otherwise withdraw.

Brockton, Mass. Supt. G. L. Farley has continued the boys' "tryout" class under the name of the "boys' industry class." Manual training, weaving, printing and bench work have been added to the course.

Waukegan, Ill. The school board has established a vocational training system for younger children.

Logansport, Ind. The school board has introduced the study of agriculture.

Omaha, Neb. A new commercial high school has been opened. The school will be in session the year round if the attendance is sufficient.

Albert Lea, Minn. A four years' course in agriculture and a year of botany, zoology, physiology and eighth grade agriculture have been provided as an extension of last year's work.

The work in each course will be practical and

each class is expected to make one field trip each week. The course in farm mechanics includes the care and management of farm machinery, silo construction, drain-laying, water supply, equipment of houses and barns, location and construction of farm buildings, and gas engines.

The study of soil includes composition and formation of soils, moisture, experiments in capillary movements of water under different conditions, experiments in methods of converting soil moisture, physical effect of humus and organic matter in the soil, temperature effected by color and drainage and tilling, elements for crop production, pot experiments in growth of plants, fertilizing and testing for acid conditions.

Pittsburgh, Pa. A new phase of vocational education has been attempted by the industrial plants following the introduction of this subject into the schools. The idea involves the education of young men of technical aptitude for salesmen. Those who desire to follow this vocation are taken into the manufacturing plants, given a living wage and taught the principles of production and the character of each of the several products of the business.

At the end of each week a report is required of each novice and the progress he has made is scrutinized and noted by expert tests of the firm.

With the completion of his initial training, the young man is transferred from one department to

another, until he has mastered the details connected with each department. He is then sent forth as a sort of missionary introducing the products of the plant among other firms requiring the same. Upon the completion of his training the corporation is in possession of an expert in its own line who has confidence in the value of the company's productions and who is able to demonstrate their importance and superiority to others.

Findlay, O. An agricultural course has been established. Music has been replaced in the school course.

Supt. J. M. H. Frederick of Cleveland has made tentative plans for the establishment of an agricultural course for teachers. It is planned to place the work in charge of an expert from the Kent normal school. Attendance is made voluntary, but it is thought the classes will be well patronized.

Agriculture has been introduced in the rural schools of Iowa. A director has been secured to supervise the work. Meetings will be held in all the various schools for the purpose of giving teachers the necessary information.

The study of agriculture has been introduced in the township schools of Pennsylvania. A course has been prepared which contains much that has been found of value in other states where more importance has been given the study, as well as that which will be of particular value in the state of Pennsylvania.

Mt. Vernon, O. A course in agriculture has been added to the high school curriculum. First-year students may elect agriculture in place of physical geography and botany.

Agriculture, manual training and domestic science instruction has been extended to all the schools in Indiana.

St. Paul, Minn. The vocational school work has been consolidated and turned into a trade school, with a practical course designed to fit boys as journeymen.

Bridgeport, Conn. Industrial education has been provided for high school pupils. The introduction of the course was made possible by the offer of the local trade school to co-operate with the high school in this work.

Kansas City, Mo. Plans have been completed for the continuation schools for those who are forced to work before finishing their education. Sewing, hat trimming and domestic science are taught for the benefit of married women.

Jackson, Mich. Typewriting and shorthand have been added to the fourth year of high school.

Malden, Mass. A commercial course has been installed in the high school. It is estimated that about one-half of the students have expressed a desire to take the course. A room for stenography and typewriting has also been provided. A spe-

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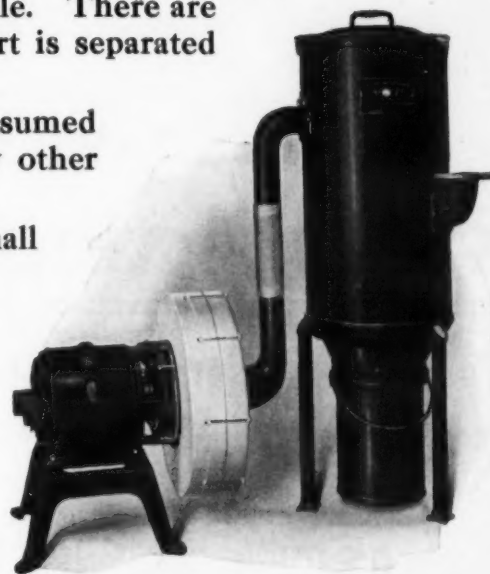
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cial course in vocational training has been established. The course includes visits to different industries and observation of actual operations, as well as securing vacation employment for students.

Springfield, Ill. The manual training work will be broadened this year. The school board committee recommended that the work be enlarged to include practical gardening and the study of soil and plants. It was also recommended that the principal of each school be placed in charge of the manual training work.

Streator, Ill. An elementary industrial class has been begun. Twenty-five boys from thirteen years upward can be accommodated. The consent of the parents and principal must be secured before they can be admitted.

The course of study provides for one-fourth day in the workshop and mechanical drawing room. The work covers a period of two years.

Riverside, Ill. The school board has installed the Gary system of teaching in the schools. This system was first operated in the schools of Gary, Ind., and provides for a division of the student's time. One-half is devoted to academic work and the other to industrial training.

Joliet, Ill. Manual training has been introduced in the sixth grade. The change whereby the sixth grade has been included in the work has increased the size of classes fifty per cent.

An accounting course has been introduced in the high school at Elgin, Ill. A stenography course is also in operation.

A commercial course has been introduced in the high school at Wilmington, Del. The course has been planned to include four years of English. Regular high school mathematics will be pursued with modifications as applied to business. Science and history will also be included. The ordinary commercial subjects will be given as a basis for the training.

The school board at Smithville, Tex., has provided additional courses in science and commercial branches.

State Superintendent E. T. Fairchild of Kansas has begun a campaign for supporters of the Page bill to provide assistance for trade and agricultural schools in the state.

The Page bill provides \$15,000,000 for government aid to schools. The state at present pays

\$200 per year to schools which teach agriculture, manual training and domestic science, and the aid provided by the government would make possible additional facilities for handling these subjects.

Freeport, Ill. A two years' commercial course has been introduced in the high school.

Los Angeles, Cal. A supervisor of agriculture has been appointed. Five assistants will work with the supervisor in co-operating with the grade teachers and also teaching the study in the upper grades. Each person will be assigned a definite portion of the city as a field for operation. It is proposed to include nature study and the planting of shade trees. Vacant lots will be secured near schools for gardening purposes.

Quincy, Mass. Vocational classes have been established in the schools. The boys' work includes practice in working drawing, freehand drawing, applied design, cane seating, printing, show tapping. The work for the girls includes instruction in cooking, sewing, domestic and laundry work, home nursing. The purchase and preparation of food, serving of meals, care of the sick and other training will be included in the course.

Plainfield, Ill. Classes will be conducted in business law and commercial geography in the third and fourth years of high school. First-year students will be given instruction in agriculture besides the regular subjects.

Detroit, Mich. Continuation courses for employed boys will be conducted twice each week. Classes for girls have also been provided. Employers will each morning send one-fifth of these girls to the school. Only those from fourteen to sixteen are open to entrance.

Middletown, Conn. A commercial course has been introduced in the high school.

Tonopah, Nev. A special course in industrial and commercial training has been established.

Winnemucca and Eureka, Nev., have introduced commercial courses.

Los Angeles, Cal. Gardening, horticulture and agriculture will be made a part of the school course this year. Textbooks will be provided and actual practice will be recorded on report cards. It is expected that the results of the work will be brought to the attention of the parents in the homes and that the yards, vacant lots and street curbs will be made more beautiful.

New York, N. Y. Free evening classes have been established at the Murray Hill Trade School. Mechanical and architectural drawing, cabinet-making, carpentry, plumbing, sign painting and other trades will be taught. Classes in bricklaying, sheet metal work, auto engine practice and steam engineering will be organized as soon as applications are received.

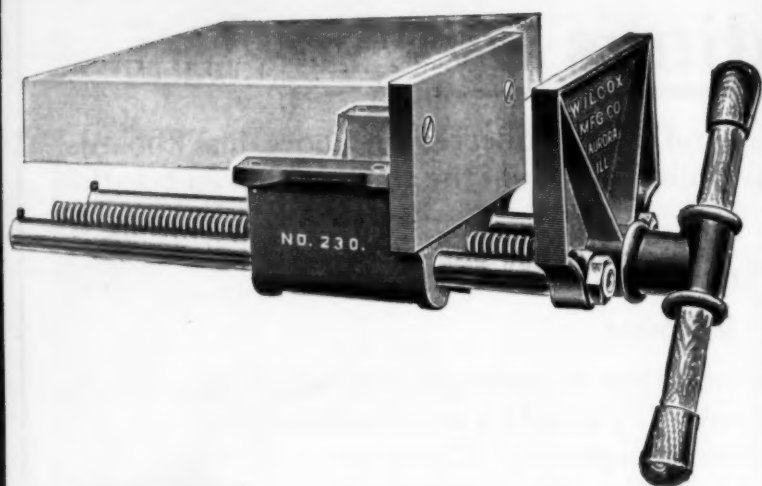
North Attleboro, Mass. The high school commercial courses have been revised. The work in this department will give the students a training which will entitle them to do first-class work. With it will come much skill in the use of the hand, mental alertness and clear perception. As these subjects point more and more directly toward the vocational idea in education much emphasis will be laid upon that side of the work so that pupils may be enabled to do efficient work after graduation.

Dayton, O. Part-time instruction has been introduced in several schools adjacent to factory districts. The work is designed for children between fourteen and sixteen years of age who are employed and will be similar to the courses pursued in the sixth, seventh and eighth grades of the regular schools. The employers are required to sign the contracts agreeing to the time selected by the board for school instruction. They are also required to insure the attendance of such employees at the school. Their failure to attend makes the children subject to the truancy laws.

Kansas City, Kan. The school board has established an afternoon and evening continuation school for all persons over fourteen years of age who cannot attend the regular sessions of the schools.

The board of education, in addressing the public, gave as the principal objects of the school the following:

1. To establish the rudiments of an education.
2. To increase the industrial efficiency and adaptability of the young people.
3. To assist young people to select the vocations for which they are best fitted.
4. To establish a proper relationship and appreciation between the employer and employed, and to show that their interests are mutual and inseparable.
5. To establish culture.
6. To form character.
7. To establish high ideals of citizenship.



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AMONG BOARDS OF EDUCATION.

The New Orleans Election.

After a bitter campaign between two factions of the Democratic party, the new school board for New Orleans was nominated Sept. 3, the nomination being equal to an election. The new board is composed of five members and will supersede the old board of seventeen members. They will serve for four years. By the terms of the new school law adopted at the recent session of the Legislature the term of office for the school boards throughout the state are two, four and six year terms, overlapping, but by an amendment to the Burke law this plan was changed as to Orleans parish and the old plan of a four-year term adopted.

The five members of the new school board are representative men. One is Sol Wexler, prominent in Jewish circles and head of the Whitney-Central Bank & Trust Company, one of the largest financial institutions in the South. Another is Charles T. Soniat, a prominent Creole attorney-at-law and a member of the Louisiana Historical Association. John X. Wegmann, president of a local insurance company, is another member. Charles J. Colton is the only member with actual experience on the school board, as he was an efficient and able member of the old board and ran away ahead of his ticket in the election. The fifth member is Joseph P. Buckley, a young man in the stationery business who is very prominent as a Catholic.

The working of the new board under the new school law and reduced membership will be watched with much interest by the school interests. The new board will be elected in November and go into office in January.

Holyoke, Mass. The city authorities have ordered the placing of signs near schoolhouses warning automobilists to proceed with caution.

The board of education of Dubuque, Ia., has purchased three sets of industrial collections for the schools for use in connection with geography work. The industrial collection consists of specimens of leading industries, arranged and classified so that the various slips in the development of the industry and its by-products may be followed. The products included are cotton, silk, coal, limestone, clay, iron, steel, petroleum, corn and articles made from it, rubber, gutta percha, granite, sandstone, slate, gypsum, spices, woods and articles made from it. Each school will have the use of them for a certain period during the year.

A protest from the Federation of Catholic Societies has been presented to the Philadelphia board of education in which the society upholds the right of all pupils to entrance in the normal school. The society declares that the attainment of proper standard of scholarship is sufficient reason for entrance even though the student be graduated from other than the public schools. The normal school is overcrowded, which necessitates a limit to the number admitted.

The school board of Rock Island, Ill., has introduced talking machines as an aid in teaching music. The board is of the belief that many teachers are required to teach singing when they are not able to sing themselves.

The school board of Sacramento, Cal., has placed signs on school grounds prohibiting smoking and all intercourse between teachers and agents during school hours.

Atlanta, Ga. The school board has ruled that no outsiders will be admitted to the local schools unless it is shown they have become permanent residents of the city. It has been customary for people to send children to relatives in Atlanta to secure an education, and the number became so great that it was necessary to stop the practice.

Minneapolis, Minn. The school board has placed signs in schoolhouse polling places prohibiting smoking and expectorating. Policemen have been directed to enforce the regulation. A proposition to place sawdust on these floors was decidedly disapproved by the board.

The school board of Mt. Lebanon township, Pittsburgh, Pa., recently became convinced that the pupils were being loaded down with too much schoolwork, making them over-educated and lacking in health. The board decided to make several changes and called a meeting of the parents for a discussion of the subject. The meeting ended with a unanimous vote for the board's plan.

The following are the changes: Elimination of night work; elimination of examination; noon dismissals of primary grades; abolishment of seventh and eighth grades; reducing of high school course to two years; astronomy, forestry and agriculture to be taught by intelligent reading, observation and discussion; vocational training, vocal music, cooking and sewing to be provided for the girls; full hour of mathematics; daily discussion of current topics and elimination of civil government; algebra for the first six months of the first year of high school; daily calisthenics and gymnastics for all pupils and modern playground equipment; essentials of physics and chemistry in high school courses and elimination of American history.

The school board at Ottumwa, Ia., has lengthened the high school hours to five and one-half. The morning session begins at 8:30 and closes at 11:30. The afternoon period continues from 1 to 3:30. The extra time is given to allow teachers the opportunity of instruction on the assigned lesson.

The school board at Columbus, O., has purchased an automobile for the building department.

The school board of Springfield, O., has permitted the use of schools for musical and literary entertainments. Buildings where gymnasiums are located will also be used.

The school board of Philadelphia has voted to ask the city council to provide wooden block paving near school buildings for the purpose of lessening the noise from street traffic. Supt. M. G. Brumbaugh recommends "zones of silence" around schools. It is asserted that it is impossible to have windows open because of the noise from street vendors, vehicles, factories and foundries in the vicinity.

The school board of Newark, N. J., has inaugurated free Sunday afternoon lectures in the school buildings. Eight talks will be given, four in each of the two buildings provided. During the discussion of the subject it was pointed out that many people found it difficult to attend evenings, but could easily be present on Sunday afternoon.

The salary of the secretary of the board of school examiners at Buffalo is to be raised from \$1,500 to \$2,000.

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DENTAL HYGIENE.

The school board of Freeport, Ill., has included \$1,000 in the yearly budget for the care of the teeth of poor children.

Detroit, Mich. The school board has appropriated \$5,000 for dental inspection in the schools. The appropriation provides for four inspectors, half time, at \$500 per year each for general school work; one operator for one-half day weekly at the city health building, at \$600; addition to dental outfit at the building at \$200; one operating outfit for public school at \$400, and one at Visiting Nurses' Association at \$400; three operators at each of the above places, one-half day weekly, at \$750; printing, stationery and supplies, \$250.

Pittsburgh, Pa. A school dentist has been provided. The salary attached to the office is \$500.

Lowell, Mass. Equipment to the amount of \$900 has been installed in the dental clinic to be conducted this year.

Woonsocket, R. I. Six dentists have been appointed to make inspection of the school children's teeth.

Niagara Falls, N. Y. Dentists have been asked to volunteer services in examining the teeth of school children.

HYGIENE.

Philadelphia, Pa. The health of school children will receive greater attention this year, especially in regard to environments in the classroom. Desks will be inspected to discover whether they are properly placed in the rooms. Benches must be the right height. Physical exercises will also be conducted by the teachers.

Washington, D. C. All children were compelled to be vaccinated.

New Bedford, Mass. The rules committee of the school board has recommended that no school building shall be built or remodeled until the plans and specifications have been approved by the superintendent and the inspector of school property.

Chicopee, Mass. All children who were never vaccinated were obliged to submit to the operation.

New York, N. Y. The board of education has made plans for the establishment of a department of educational hygiene. The department will provide hygienic guidance in school administration and expert advice to teachers dealing with exceptional children. It will also perform the hygienic duties now performed by the health department.

Indianapolis, Ind. The city legal department has declared the board of health not liable for the books destroyed in schools where a contagious disease has been prevalent.

New Orleans, La. Vaccination of all school children has been conducted.

A school health survey of the state of Minnesota has been begun by the state board of health. Circulars have been sent out containing questions on sight, hearing, mode of living, etc. A special director has been placed in charge of the compilation of information.

Minneapolis, Minn. The schools have recently been equipped with soap and towels for the use of pupils.

Fitchburg, Mass. An emergency room has been opened in the high school for prompt medical attention in cases of sudden illness.

Boston, Mass. The city health department has co-operated with the school hygiene department in listing homes where contagious diseases exist. The health department has prepared lists for the use of physicians. The action was taken for the purpose of segregating pupils who are ill and protecting healthy children.

Dayton, O. The board of education has been notified by the health department that the rule relating to vaccination of pupils will not be rigidly enforced this year. The enforcement of the rule last year compelled several patrons who objected to the rule to establish an independent school for non-vaccinated children.

New York, N. Y. An eye clinic has been established in one of the school buildings. All pupils with infectious eye troubles will be placed in this building, where they continue their studies while they are receiving treatment. As soon as a cure has been effected the child returns to the regular school from which he came.

Cleveland, O. The Binet tests, by which the mental age of children and adults is determined, has been used the past year. It has shown that incorrigibility of pupils was not due to natural meanness, but to mental instability and mental enfeeblement. The results of the tests show that of the 1,281 pupils tested, 459 were on the incapacitated list and should be placed in institutions provided for such persons.

All persons who enter the teaching force in Kansas City, Mo., are required to present health certificates before they will be appointed.

Kenmore, O. The school children have been required to present vaccination certificates to guard against the possibility of an enforced closing of the schools.

MEDICAL INSPECTION.

Memphis, Tenn. Five visiting nurses, two of them colored, have been appointed by the health department for inspection of school children. The colored nurses will work in the colored schools. Daily inspections will be made and sick children will receive temporary treatment. The nurses will also trace truants and give instruction to parents in the homes.

New Castle, Pa. A school medical inspector has been provided. The board of education also adopted a resolution that discussions on sanitary topics should be in charge of the school authorities and not taken up with city authorities.

Cleveland, O. The school medical supervisor has made plans for a reorganization of the medical inspection department. The school hygiene, physical training and medical inspection departments will be co-ordinated. It is proposed to teach the pupil how to live, with special emphasis on hygiene. Domestic science, manual training, geometry and other studies will be supplemented by practical lessons in hygiene.

Tacoma, Wash. Plans have been made for more extensive work in medical inspection. Pupils afflicted will be given remedial treatment. More complete supervision of athletics will also be provided.

Minneapolis, Minn. The school nurses in several school districts have been placed in charge of the baths. Teachers will designate pupils who are in need of instruction in cleanliness and the nurses will supervise the work. The school hygiene department is aiming to improve the conditions of some pupils by showing them the correct way to live.

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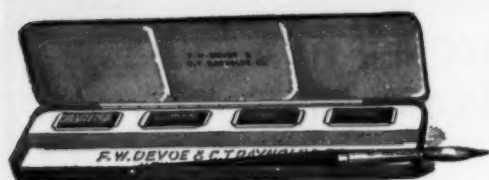
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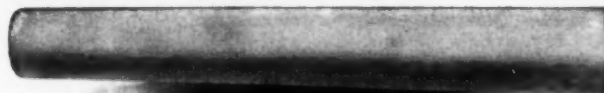
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AKRON, O.

will be undertaken this year. The work will include the compilation of record cards covering all the conditions arising in the school health of children. The cards will be preserved and transferred with the pupil wherever he goes. The cards contain spaces for notations in regard to condition of the child's nose, ears, eyes, throat, skin, heart, nervous system, and other vital points of information. It is proposed by the medical authorities to obtain a complete history of the child's past physical condition if the need arises at any time for this information.

Pawtucket, R. I. Medical inspection has been provided for this year. It is proposed to raise the physical standard of the children and to improve conditions as to their physical well-being generally.

Southbridge, Mass. The medical inspectors have made plans for a thorough inspection of all pupils at stated intervals. This will be an addition to the work already conducted. It is the opinion of the inspectors that although the work of inspecting the eyes and ears of pupils has been accomplished successfully, yet it does not go far enough into a child's physical condition. A disease of the eye may be present in its incipient stage and at the time of the examination as conducted by the teachers may not be discovered and will therefore make its appearance later in life.

Bartlesville, Okla. Medical inspection of all pupils in the schools will be conducted this year. An effort will be made to discover whether a pupil's failure to do good school work is due to natural dullness or to shirking on the part of the pupil.

Cleveland, O. Fifteen doctors and eighteen nurses have been appointed to carry on the work of medical inspection.

Northampton, Mass. A school nurse has been appointed. Tentative plans have been prepared for the conduct of the work.

Easton, Pa. Medical inspection of all school children has been begun. The city is divided into four districts, each inspector taking one part, or about 1,000 children during the year. The inspection begins with the lower grades and continues up to the fourth year of high school.

The school board of Minneapolis, Minn., unanimously approved the proposition to provide \$25,-

000 for the promotion of health in the schools. It is proposed to have one nurse for every 1,500 children and one physician for every 3,000, making a medical staff of twenty-five nurses and twelve physicians.

The school board of Woonsocket, R. I., has engaged a school nurse. The expense of maintaining the services of the nurse will be borne jointly by the Anti-Tuberculosis Association and the board of education.

Waukegan, Ill. A school nurse has been engaged to make examinations of pupils and a physician has been appointed to have charge of suspected cases of contagious diseases.

Corry, Pa. Medical inspection has been provided for the public schools. The action was taken to prevent the spread of contagious diseases.

The school board of McKeesport, Pa., has voted to appoint thirteen inspectors to conduct physical examinations of pupils.

Carlisle, Pa. Medical inspection has been ordered in the schools in accordance with the Pennsylvania school code.

St. Paul, Minn. The school board has approved a resolution to the effect that the medical inspector be required to remain on duty the same number of hours as teachers. His salary is fixed at \$1,400 per year.

The chief of the medical inspection staff of the Pittsburgh, Pa., schools has declared that more than 72,000 children have physical defects. He reports that 24,500 have bad teeth and 48,000 have other defects.

Niagara Falls, N. Y. Medical inspection has been provided.

An examination of the Boston school children has been undertaken to detect the presence of defects. A comparison will be made of the results of last year's and this year's work.

Aberdeen, S. D. The school board has provided a staff of physicians to carry on the work of medical inspection.

Spokane, Wash. The school board re-elected the chief medical supervisor and four assistants for this year's work. The salary of the school nurse was raised to \$100 per month. It is proposed to introduce permanent physical record cards, to begin with the first three grades.

Columbus, O. Medical inspection has been introduced. A consulting physician at \$1,000 per

year and two nurses at \$60 per month have been appointed.

Minneapolis, Minn. The school board has designated the physicians from whom parents must secure health certificates before their children can secure working permits. The action is the result of the provision of the state child labor law delegating to school boards the power to appoint such physicians.

One of the school nurses in the schools of Des Moines, Ia., during the past year personally examined every two weeks a total number of 4,830 children, or a total of 80,803 examinations. In addition to examinations, 188 visits were made to homes for the purpose of teaching mothers the care of children. These figures were cited to offset the arguments of the Polk County Medical Society in behalf of more general inspection of the children.

Bethlehem, Pa. A medical inspector has been provided and examinations of all pupils will be conducted.

Boston, Mass. The medical inspectors of the city schools have been notified by the board of health to segregate all pupils who are found to be ill during the first term of school. It is expected that the regulation will enable the inspectors to obtain a health record of the school children, and at the same time reduce the amount of sickness usually existing at that time.

Wheeling, W. Va. Medical inspection has been introduced. Children may be examined upon the request of the superintendent and may be prohibited from school attendance under certain conditions.

De Kalb, Ill. A school nurse has been appointed, who shall act in an advisory capacity and supervise the hygiene of the school and its vicinity. She will also instruct parents and teachers in the care of children.

Pontiac, Mich. A nurse has been appointed to assist in the work of medical inspection.

Tecumseh, Neb. The board granted a petition that the schools be provided with medical inspection.

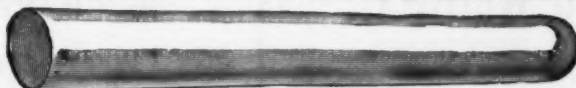
RULES AND REGULATIONS.

Racine, Wis. No high school pupil who uses tobacco will be allowed to represent the school in any manner. Any pupil who becomes a member of a secret society will be expelled.

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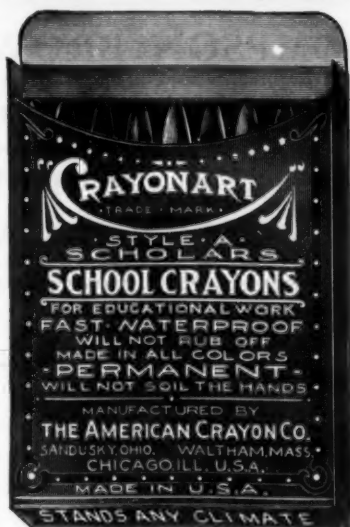
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Dayton, O. The school board has ruled that pupils must remain in the Steele high school until 2:15 in the afternoon. The rule was formulated for the purpose of preventing pupils from leaving during school hours. It does not prevent them from indulging in rest periods between recitations, but it does compel them to either take their lunch with them or secure it at the school building.

Lebanon, Pa. The school board has passed a rule providing for the suspension or expulsion of any pupil in the schools who shall haze or mistreat any other pupil. The board also provided for a hearing previous to the sentence imposed.

St. Joseph, Mo. The school board has begun the formulation of a set of rules which shall provide for the debarrment of members of secret societies from competitions of any kind, representation of the school, membership in school societies and organizations and eligibility to class offices.

Jacksonville, Ill. The board of education has provided blanks for use when ordering supplies for the schools. Orders will be written in duplicate, the duplicates to be given to the principals. The board has also ordered that all bills for goods must be received at the school headquarters before the end of the month. If firms do not send bills they are themselves liable for the loss.

Elmira, N. Y. The school board has passed a rule that all grade pupils who are not in the eighth grade must attend the school in the district in which they reside. The practice of allowing transfers during past years has caused a great deal of trouble and the board decided to abolish the practice.

Wilkesbarre, Pa. The school board has passed a rule requiring applicants for teaching positions to indicate in writing that they will not marry during the school year. The action was taken to avoid a scarcity of teachers during the winter.

Eau Claire, Wis. The school board has passed a rule for the protection of school property. The regulations are as follows:

1. Any pupil either in the grades or in the high school, who does not keep covered, destroys, marks, defaces or injures a schoolbook loaned to him, in any way, natural wear and tear excepted, shall for the first offense be fined an amount equal to the damage done, by the property clerk of the board of education, who shall collect the fine, and if the fine is not paid within one week,

the pupil shall be deprived of the free use of books loaned him by the board of education. For the second offense the pupil shall forfeit his right to the free use of school books for the rest of the semester and for the third offense he shall be deprived of the right of the free use of books for one year. Pupils making use of books belonging to other pupils shall be punished in the same manner. Pupils who have been deprived of the free use of books may buy them from the board of education at cost if there is a sufficient number of books on hand.

2. Any pupil who has marred, defaced, injured or destroyed any school property shall repair or replace the same at his expense. If this is not done in a reasonable length of time the principal shall assess a fine equal to the damage done or what it will cost to replace the property of the board. If this fine is not paid within one week the pupil shall be suspended until payment is made.

3. All fine money shall be turned over to the secretary of the board within one week after being collected.

4. It shall be the duty of each janitor, teacher and other persons in the employ of the board of education to report to the principal of the school any violation of any rules adopted by the board of education or directions given by the principal or superintendent.

Madison, N. J. The school board has introduced the experiment of school dances and free entertainments in the high school auditorium.

Des Moines, Ia. The school board has expressed its disapproval of social activities which interfere with the school work of pupils. It is proposed to hold interviews with parents of pupils who are indulging in social affairs too extensively.

Supt. M. G. Brumbaugh of Philadelphia, Pa., has decided to abolish high school fraternities. The action has the approval of other educators of the city.

Detroit, Mich. Washington's birthday, Lincoln's birthday and the Friday following Thanksgiving Day have been dropped from the list of school holidays.

Sullivan, Ind. The school board has ruled that no high school student shall be a member of a secret society or visit the meeting place of any such society.

Muskogee, Okla. The school board has ordered caps and gowns for the next commencement ex-

ercises. No flowers or presents will be allowed during the progress of the public entertainments. The board had formerly requested the girls to make their own clothes in the hope that this would obviate the evils of expensive dresses, but this did not prevent a recurrence of the trouble.

SOCIAL CENTERS.

Harrisburg, Pa. Supt. F. E. Downes has expressed himself in favor of social centers in the schools, as suggested by one of the local papers. Since 1909 he has advocated the introduction of these centers and has maintained that there is no reason why a larger use cannot be made of school buildings.

Mr. Downes believes that the greatest difficulty in the establishment of effective social centers is that of proper organization. They should be established in response to a real demand on the part of the people and promoted by responsible organizations in the various sections in which they are located. In addition to the foregoing, they should receive the heartiest co-operation of the press. It has been found that social centers in communities where the residents are not interested nor actively engaged in supporting the same are not social centers in a real sense.

In regard to creating interest in the movement it was suggested that a hundred enthusiastic men and women be banded together in a concerted effort to arouse the community to the value and helpfulness of the idea. This has been found to be more successful than any single individual or agency not a vital part of the project.

Supt. Charles E. Chadsey of Detroit, Mich., has expressed himself in favor of the use of school buildings for public entertainments. He declares, however, that they should not be used for political meetings by the various political parties represented. Debates and neighborhood discussions are perfectly proper. It is contended that every request should be carefully scrutinized by the board of education before permission is given, in order that nothing is permitted to enter the schools which is of a partisan nature or interferes with the real purpose for which they were built.

SALARIES.

Newburgh, N. Y. The school board has fixed the salaries of seventh grade teachers at \$625 per year and teachers of twenty-five years' experience at a minimum of \$600 per annum. The salaries were effective September first.

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COMMON SCHOOL STUDIES.

Joliet, Ill. Spelling has been made a part of the English course in the township high school. Instruction will be given three times a week. Each teacher presents a list of words misspelled in class work, which lists are combined as a basis for spelling lessons.

Pittsburgh, Pa. The curriculum in the elementary schools has been reduced. It is arranged in groups. Group one includes reading, writing, spelling, language and grammar. Group two includes arithmetic, geography and



FRANK WILLIAM MILLER
State School Commissioner, Columbus, O.

history. Group three includes music, art, industrial training and physical training.

Principals and teachers will not be permitted to give less than a minimum nor more than a maximum amount of time per week to any subject. The courses have been modified to make it possible for teachers to accomplish the work in a given time even with weak classes.

Cleveland, O. A new system of reading has been introduced by Supt. J. M. H. Frederick. The Aldine, Gordon and Ward methods will be used. It is proposed to engage experts for the instruction of teachers in these various methods.

Pittsburgh, Pa. A guide for teachers, which contains principles to regulate all further considerations and revisions of the courses of study, has been prepared. The principles are as follows:

Reading—Recognize as soon as possible the inadequacy of a single textbook a year in reading. Enlarge rather than reduce the range of children's reading.

More attention to the cultivation of habits of home reading in good literature.

Larger use of public libraries and circulating libraries.

More interesting and less difficult reading.

More attention to the study of dictation.

Writing—A practical slant, not the vertical to be emphasized.

Less effort to secure absolute uniformity among all children and more attention to the development of the individual hand.

Spelling—More attention to the words misspelled in everyday work.

Foster the spirit of contest in spelling.

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No technical grammar before the seventh grade.

More attention to the development of correct habits of language in all the oral and written work of the schools.

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Only such kinds of work outlined as may be readily done by children themselves when once begun. Less demand on the teacher's individual labor in order to get work done.

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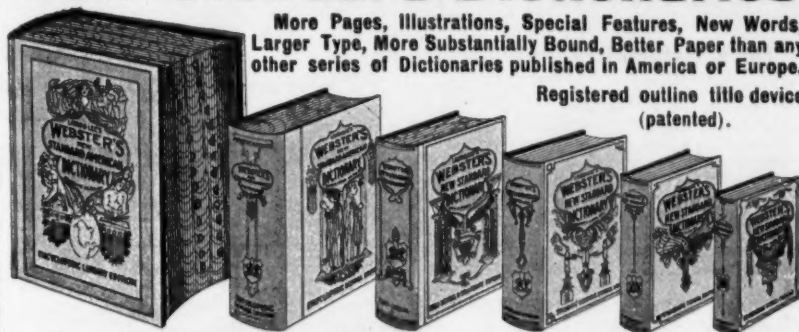
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More attention to supervised outdoor play and to indoor games and folk dances in all grades.

Adequate playgrounds around each public school building.

Systematic instruction in hygiene during opening exercises in each year of the child's school life.

Omaha, Neb. A new course in geography has been prepared. The work has been condensed thereby shortening the time required and strengthening the study. This is preliminary to the idea that emphasis will be placed upon the proper assignment of lessons and elimination of non-essentials in various subjects. An attempt will be made to give children the opportunity of engaging in story-telling, expressive reading and dramatization before audiences. It is proposed to train children in appearing in a public way before the school audience so that when they finish their school course they will not be embarrassed when making public appearances.

Plymouth, Pa. The school board has eliminated algebra from the eighth grade course.

RETARDED AND EXCEPTIONAL PUPILS.

Peoria, Ill. The school board has favorably considered the establishment of a special class for retarded children. The experiment has previously been tried with a dozen pupils in one of the public schools. An appropriation from the state will be necessary to begin the work.

St. Paul, Minn. The school board voted to establish a school for deaf mutes, provided there are sufficient patrons.

Peoria, Ill. A school for retarded pupils has been provided. The school will provide instruction for those who, while not lacking in mental faculties, have fallen behind in their respective grades and who need only careful training in order to reach the grades they should be enrolled in at the present time. Supt. G. T. Smith believes that the establishment of this department will enable bright pupils of both sexes to be developed so that they will not be hopelessly backward and in the end will reach the positions of former pupils who were with them in the beginning.

A school for exceptional children has been favorably considered by the school board of Little Rock, Ark. The term of the school will be similar to the regular school. The school is an imitation of those operated in large cities where the instruction is especially adapted to these children.

Supt. J. H. Collins of Springfield, Ill., has prepared a chart which shows that grade pupils lag in their school work through the grades.

According to Mr. Collins' figures, there are 87 pupils in the primary grades eight years old, 34 nine, 12 ten, 3 eleven, 6 twelve and 1 thirteen years of age. Taking the normal age of seven as the standard it is found that these pupils are behind from one to six years.

The figures also show that the failures increase as the pupils advance in grades, probably due to the lack of power to overcome the added difficulties of the next grade, to lack of ambition or to failure to do the work of one subject in all grades. It was found that in the second grade 161 pupils failed, in the third 258, while in the fourth 344 fell behind their class.

Mr. Collins states that from this grade on withdrawals are frequent. A remedy for this condition is eagerly sought by the school authorities. Teachers have been instructed to assist these pupils and push them ahead as fast as possible.

Delinquent boys in New York City schools will be given more attention this year. Plans have been made for five special schools. These boys will be taken from the regular classes and placed where they may receive the necessary training without wasting the time of normal pupils. It seems that during the past year classes containing one or more of these incorrigibles were often interrupted by the actions of these individuals. Teachers were in danger of injury and other pupils became influenced by the presence of these boys.

Minneapolis, Minn. A special school for sub-normal children has been opened. The school will provide instruction for stammerers, deaf and physically or mentally deficient children. Truant and incorrigible children will be given new work with hygienic and industrial features.

Newark, N. J. New classes will be established for defectives and deaf children.

Anderson, Ind. Moving pictures for high school classes have been considered favorably.

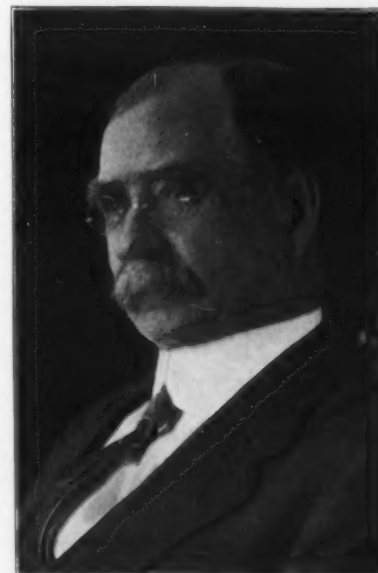
Jackson, Mich. A day school for deaf children has been provided. The classes are not limited to those residing in the city.

Supt. Carroll G. Pearse of Milwaukee has given instructions to principals to encourage pupils in gauging their own work and progress. A report on the success of the plan will be submitted. An effort will be made this year to standardize the school work to a greater extent for the purpose of giving pupils a better opportunity of knowing where they are falling behind.

SPECIAL STUDIES.

Cuba, Ill. Political economy, commercial law and commercial geography have been introduced in the course of study.

Indianapolis, Ind. A committee has been appointed to work with the officers of the Herron Art Institute in the preparation of a schedule for art instruction.



WM. H. SMILEY
Superintendent of Schools, Denver, Colo.

Don't Get "Marooned."

On Saturday, June 29th 1912, *The Boston Herald* printed the following in its leading editorial under the heading

"For a Standardized Stenography:"

In this country we have had a senseless multiplication of shorthand systems, due to the desire of individual teachers to get the advertising advantage of "something a little better" than the rest of the world. There is such a thing as being "marooned" on a bad system, after one has given months of laborious effort to its acquisition. No better advice can be given to the youngster studying shorthand than to take one of the long-tested and widely used methods.

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MANUAL ARTS STUDIES.

Brockton, Mass. Manual training has been extended to the eighth grade.

Spokane, Wash. The school board has abolished the study of Greek, astronomy and advanced geography in the high school. Psychology and agriculture have been introduced in the senior year for one term. Agriculture, trigonometry and machine shop work have been placed in the senior year of the manual arts course.

Moline, Ill. A special kindergarten course has been introduced in the high school for those desiring to become teachers of this department.

Racine, Wis. The school board has ruled that high school girls must complete a year's course in domestic science before graduation.

Wichita, Kan. Three centers for manual training and domestic science have been provided for grammar grades. Sixth grade pupils will be given manual training. Sewing is elective for the eighth grade.

Sumner, Fla. The school board has erected an addition to the high school to house the agricultural departments. The cost of the work was about \$1,000.

Barron, Wis. Sewing has been introduced in the sixth and seventh grades and cooking in the eighth grade and high school freshmen classes. Students of the second, third and fourth year of high school are given instruction in sewing. Courses for outsiders will be started later in the year.

Tarentum, Pa. One hour each week will be given to sewing. A course in mechanical drawing in preparation for work in manual training has been provided.

Hannibal, Mo. The school board has appropriated \$1.50 for each girl in the domestic science department in the grade schools and \$2.00 for those in the high school.

Wichita, Kan. A practical course in civics, an extension of the commercial work, the separation of civics into two divisions and the introduction of a normal course are some of the innovations in the high school.

Minneapolis, Minn. A course in home economics and one in domestic science have been introduced.

San Antonio, Tex. The school board has abolished the study of music, freehand drawing,

painting and sewing in the grades below the high school. French and Greek have been abolished in the high school. More attention will be given to manual training and domestic science.

Los Angeles, Cal. Pupils of the domestic science courses will be given instruction in the selection of food for household uses. It is the purpose to train future housekeepers how to save in the various ways connected with household management.

Elgin, Ill. Chemistry classes will be given practical work this year. It is proposed to have candy, coal, milk, meat and other articles tested by the pupils of this department of the high school. The board approved the purchase of a coal-testing equipment.

Long Beach, Cal. The following courses have been added to the high school curriculum: Patternmaking, agriculture, economics, applied mathematics, Greek, and a one-year commercial course for the third and fourth-year students.

Chicago, Ill. Manual training instruction has been provided in three high schools. The action was taken for the purpose of enabling overgrown boys to complete their technical education before they pass the age limit of twenty-one years. At the same time it obviates the necessity of elementary students of more mature years being compelled to attend classes with primary students.

Minneapolis, Minn. Sewing, millinery and practical shopping will be taught in the evening schools this winter. The work will include instruction in the making of plain skirts and waists. It is also proposed to have advanced classes in tailoring and making of elaborate gowns. Instruction in the remodeling of gowns will be provided.

Lima, O. A manual training course has been established in the high school. The course is as follows.

First Half Year.

First Year: Woodwork and mechanical drawing, algebra, English, bookkeeping.

Second Year: Iron work and mechanical drawing, geometry, English-rhetoric, general history.

Third Year: Wood turning, machine drawing or architectural drawing, geometry, chemistry.

Fourth Year: Machine work or cabinet-making, machine drawing or architectural drawing, physics, American history.

Second Half Year.

First Year: Bench work in wood, algebra, English, bookkeeping.

Second Year: Forge work, geometry, rhetoric, general history.

Third Year: Wood pattern making, machine drawing or architectural drawing, algebra, chemistry.

Fourth Year: Machine work or cabinet-making, machine drawing or architectural drawing, physics, civics.

Malden, Mass. A special course in household chemistry has been provided for the girls in the schools.

The school board of Omaha, Neb., has extended the manual training work. Five additional schools have been equipped and materials and tools have been provided.

McPherson, Kan. The school board has added another year to the course in domestic science and manual training.

Canton, Ill. The laboratory of the high school has been converted into a cooking school. The sciences will be abolished for one year.

The state of Georgia has formulated a law to the effect that a bird day shall be observed in the public schools of that state. The day is not to be a holiday, but a day set apart for instruction in bird life. The purpose of the instruction is to educate the children along these lines to such an extent that the birds may receive the protection they are entitled to wherever they may be. Children will also learn the usefulness of these creatures in destroying insects.

Atlanta, Ga. Manual training and drawing have been reinstated in the schools.

Pittsburgh, Pa. Two schoolrooms have been set aside for special instruction of pupils who stammer. They will be given special treatment and drills for the improvement of speech.

Grand Rapids, Mich. Fifty-nine boys have elected to take manual training and seventy-five girls have asked permission to take cooking and sewing.

LUNCHROOMS.

Springfield, Mass. A double system of recesses has been inaugurated at the technical high school. The first classes begin at 8:20. A recess of fifteen minutes beginning at 11:40 is given for luncheons for students of one floor. At 12

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o'clock the remainder of the students assemble in the lunchroom while the former continue their recitations. Five minutes is allowed for clearing the tables.

The rural schools near Spokane, Wash., have experimented with hot lunches for pupils who are compelled to eat at the school buildings. Soup was found to be more nourishing and possessed advantages over hot liquids, as only one hot dish could be provided.

Brockton, Mass. A lunchroom has been provided at the high school. Warm meat and vegetables will be served at a minimum cost.

Denver, Colo. The students at the North Side high school have complained against the quantity of food served to them in the lunchroom. They maintain that they can get more for the same money at outside places but are not allowed to leave the school grounds. The principal is in favor of the lunchroom and declares the food is clean, wholesome and good and sold at the actual cost of producing it.

Grand Rapids, Minn. The school board has appropriated \$5,000 for the purpose of paying for the meals of students who live at great distances from the schools.

The school board of Minneapolis, Minn., has cut down expenditures for high school lunchrooms. They will hereafter confine purchases of equipment to plain silver and china and a reduction of machinery. The action of the board was due to the criticisms made on the abundant and expensive equipment purchased for one of the high schools a year ago.

Fitchburg, Mass. A lunch counter has been installed on the first floor of the high school.

Evansville, Ind. A dining room has been opened in the high school. The board also inaugurated the single-session plan, by which the school sessions continue until 2:30 in the afternoon. It is the opinion of the board that the low cost of lunches will make it cheaper for pupils to stay at the building during the noon hour and that the early closing of school will make it possible for all to walk home in the afternoon.

Dayton, O. A lunchroom has been established in the Steele high school.

Philadelphia, Pa. Lunchrooms have been installed in the girls' high school and boys' high school.

The school board of Philadelphia has installed lunchroom equipment in two high schools and three public schools.

The school board of Norristown, Pa., has approved the following recommendations for the lunchroom: The appointment of a dietitian at \$12.50 per week; the re-election of two assistants at \$5; the selection of a student every two months to act as cashier at \$1.50 per week; that bids be received for provisions used for the lunches; the appointment of a supervisor; that the employees be carried on the regular salaried list.

Buffalo, N. Y. The school board has appropriated a sum of money for the expense of conducting the penny lunches this year. Principals reported that fewer lunches were stolen last year and that pupils improved in deportment after securing a lunch from the lunchroom.

St. Paul, Minn. Penny lunches have been provided in the new Madison school and five other buildings.

HIGH SCHOOL STUDIES.

Danbury, Conn. High school courses have been changed this year. Bookkeeping will be elective in the senior year only. Three years of German will be offered and two of French instead of three years of both as formerly. A science course has been provided for the senior year.

Waukegan, Ill. The school board has revised the high school course of study, replacing the elective course with a list of required subjects. Language and vocational subjects will receive special attention. First year arithmetic will be eliminated, except in the commercial course. Pupils who contemplate taking professional work after leaving school will be urged to study one of the foreign languages, but all others are not required to pursue this subject. Three units of English will be required and three each of mathematics, social science and natural science. At least two units are required in mathematics. Sixteen units or thirty-two credits are required for graduation. The change was made with the aim of reaching the few who have been in the habit of slipping through in the easiest manner.

San Francisco, Cal. The school board has arranged for German classes at a nominal cost. Fifteen buildings will be used for classes.

Cleveland, O. Thirty per cent of the failures of high school students has been attributed to in-

ability to master mathematics. Elective mathematics has been urged as a remedy.

San Francisco, Cal. A new curriculum has been adopted for the commercial high school. An interlocking system has been devised, whereby pupils may pursue certain studies in one high school in the morning and follow it up with studies outside the curriculum of the regular school which may be given at some other institution. Ten groups of studies have been prepared at the commercial high school. The groups are as follows.

Group A—A non-college preparatory course designed to allow thorough preparation to students who cannot go beyond the high school.

Group B—For the girls' course. Has the same purpose as group A, with stress laid upon non-college preparatory subjects.

Group C—Designed primarily to allow thorough preparation to students who expect to go no farther than the high school, but who may decide ultimately in favor of college. College entrance will be safeguarded through the first, second and third high school years, although stress will be laid on non-college preparatory subjects.

Group D—For those contemplating going beyond the high school, but who are uncertain about such an event. Stress is laid on college admission requirement subjects in the third and fourth years.

Group E—Designed to allow a thorough preparation for entrance to technical and scientific colleges and for the college of social science.

Group F—Designed to allow thorough preparation for entrance to college of natural science or other colleges, but not to the college of letters.

Group G is the same as the above, saving that the course of studies includes preparation for entrance to the college of letters.

Group H is primarily designed to fit students for entering normal schools.

Groups I and J are prepared for students who can remain in the high school not longer than a couple of years.

San Francisco, Cal. The school board has ruled that hereafter all pupils fifteen years or over must secure the consent of the board before they will be allowed to take a special course in the high school.

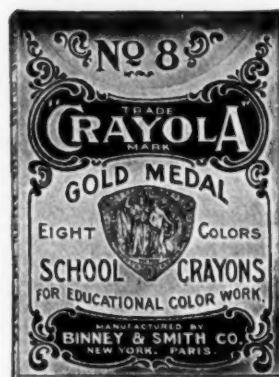
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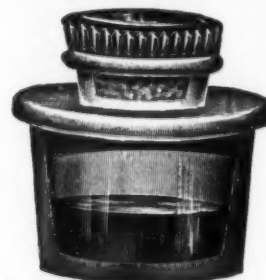


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PHYSICAL EDUCATION.

Springfield, O. The school board has appointed a woman as physical director for the girls. She will teach gymnasium exercises and give general counsel and advice.

Peoria, Ill. Two extra instructors have been added to the physical culture staff. It is planned to rearrange the work and incorporate a complete program of calisthenic exercises in all the schools. Classes for freshmen and sophomore students in the manual training and high schools will be held every week. In the grades classes will be held every two weeks.

Elgin, Ill. A director has been appointed for the high school girls' physical training classes.

Decatur, Ill. The school board has purchased a piece of ground adjoining the South school building. Space for football, baseball, a circular track and other forms of exercise have been planned.

Johnstown, Pa. The school board has adopted a set of rules governing athletic contests and athletic exercises in the high school. The rules provide that no pupil shall take part in any scheduled game of the high school team who has failed to maintain a standing of the average pupil. The average standing shall not be determined more frequently than every two weeks.

The management shall be vested in a student-manager and faculty-advising manager. The former shall be selected by the students subject to the approval of the faculty and the latter office shall be filled by the principal of the school. The faculty-manager shall formulate policies and shall express his approval of the schedule of games before submission to the school board.

The school board at Cleveland, O., has appointed a supervisor of schoolroom and indoor recreation at a salary of \$1,200 and a second assistant principal at Glenville high school at \$2,100. The indoor recreation idea has been begun for the

purpose of diverting the pupil's mind from his work during school hours by means of games and exercises between classes.

Cadillac, Mich. The school board approved a recommendation that all pupils be required to present a certificate of health before being allowed to take gymnasium work.

The school board of Cambridge, Mass., has placed the work of physical training and athletics in the grades in charge of the principals. The principal shall determine what games and exercises are adapted to the school. Teacher coaches have been suggested for the high school to carry on the physical training work and competitive athletic games. Principals are required to report those pupils who are proficient in outdoor sports.

Shamokin, Pa. A physical director has been appointed for the high school. The board believed that a director should be provided who could properly teach the rudiments of the various branches and who could direct the work so that accidents would be rare.

Brockton, Mass. The physical directors in the high school have issued cards to pupils which are to be filled out by parents with statements regarding the previous health of the pupil, his parents' physical condition previous to the child's birth and other information that may be of use in gymnasium work.

Springfield, Mass. Plans have been made for a series of talks by local physicians on diseases of children before the teachers in the primary schools. It is proposed to instruct teachers so that they can detect illnesses of children and co-operate with the school physicians in informing them of such cases.

Framingham, Mass. Physical training is compulsory for the two lower classes in the high school for both boys and girls. Pupils will also be required to undergo a physical examination

before they may take up gymnasium work.

Buffalo, N. Y. Medical inspectors are watching for cases of infantile paralysis in the schools. It is proposed to secure lists of deaths and recovered cases so as to obtain information on the extent and nature of the disease.

A gymnasium has been installed in the girls' high school at Monrovia, Cal.

Freeport, Ill. Physical training has been introduced in the schools.

Los Angeles, Cal. The school board has voted to place swimming pools in all of the large buildings to be erected in the future. Swimming will be taught to all children.

Rock Island, Ill. Physical training and athletics will be extended this year. An assistant physical director has been engaged, an athletic field has been established and a gymnasium has been equipped for the high school.

Danville, Ill. Physical culture has been introduced and a supervisor has been placed in charge of the work.

Gymnasiums have been provided in four public schools at Hartford, Conn. A special teacher of physical instruction has also been engaged. All children will be examined for defects for the purpose of adapting the exercises to the individual child.

Omaha, Neb. A director of athletics has been appointed at a salary of \$1,300 per year.

Anaheim, Cal. The school board has prohibited football from the list of athletics in the high school. The rule is the result of a large bill presented to the board for medical services rendered to injured players last year.

TUITION.

Adrian, Mich. The tuition of non-resident pupils has been fixed at \$30 for the high school, \$16 for the grammar grades and \$12 for primary grades.

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Champaign, Ill. The tuition of non-resident pupils has been fixed at \$20 for the high school and \$10 for the grades.

Hastings, Minn. The rate of tuition for non-resident pupils has been fixed at \$2.50 per month.

The school board of East St. Louis, Ill., has raised the grade tuition from \$12 to \$20 per term and the high school from \$20 to \$50.

TEACHERS.

The school board of Lima, O., has ruled that \$5 per month be withheld from teachers' salaries to protect the board in case of marriage during the school year. If the teachers do not resign they are given the back pay at the end of the year.

Los Angeles, Cal. The school board has revoked its former rule barring married women from teaching positions in the schools. The board's action was the result of numerous meritorious cases of this nature which had been brought to its attention and it was thought only just that provisions be made for engaging these teachers.

State Supt. Barksdale Hamlett of Kentucky has made a ruling to the effect that while the Kentucky school act of 1912 requires divisional boards of education to elect only teachers recommended by the trustees of their respective sub-districts, the law does not make it compulsory on the boards to elect whomever the trustee recommends for the school in his sub-district. The decision was made on an appeal from the decision of the county superintendent of Perry county.

Columbus, O. The board has modified its age-limit rule and has given the superintendent authority to use his discretion in retiring teachers who have reached the age limit. The board reserved the right to veto the decision of the superintendent by a two-thirds' vote.

Windham, Conn. The school board has adopted a resolution to the effect that no teacher who has signed an agreement to teach shall be released by the board unless the teacher be incapacitated or intends to relinquish the work of teaching.

Merrill, Wis. The school board has passed a resolution prohibiting teachers from attending dances on any evening preceding a regular school day. Friday evenings and vacation days are allowed for social functions.

The school board of Sacramento, Cal., has adopted a resolution to the effect that teachers who resign before the beginning of the fall term of school

must return the vacation salary to the city authorities.

Supt. T. A. Mott of Richmond, Ind., has announced that age and the marriage question will not be considered in the employment of teachers. The only requirements are ability and a sweet disposition.

New Orleans, La. The school board has removed the ban on married teachers, with certain exceptions.

Webb City, Mo. The school board has under consideration a plan for holding teachers to their contracts. It is proposed to require a bond of every applicant, which shall be for a sum of from \$200 to \$300, this amount to be forfeited if they leave before the school year. The board is of the opinion that in view of the fact that this is done in business it is perfectly proper to use such a method in school work. It is declared that teachers would not be so indifferent about the matter if they lost their bond and that resignations would not be so profuse.

Sacramento, Cal. City Attorney McKisick of California has rendered an opinion in which he maintains that school boards can change teachers and principals whenever they desire, but the salary must not be changed until the next year. The opinion was rendered in the case of two teachers who were demoted by the old board and who made application to the new board for reinstatement in their former positions. The board itself has taken no action in regard to the applications.

HIGH SCHOOLS.

Minneapolis, Minn. The school board has ordered that high school pupils attend only those high schools in the district where they reside.

Pittsburgh, Pa. The schools have been divided into four districts. Each building will have its own boundaries and pupils living within these boundaries will be required to attend that school except where good reasons are given for not attending the same.

Supt. S. L. Heeter of Pittsburgh has prepared a two-year high school course. The instruction is designed to benefit those who cannot complete the regular four years' course. No academic studies will be provided and English will be limited to its use in business. A fair knowledge of industrial processes will be secured. The course is as follows:

First Year: 9 B, English, commercial, geography, local industries, bookkeeping, penmanship, spelling, typewriting, industrial; 9 A, English, penmanship, spelling, bookkeeping, shorthand, typewriting, industrial.

Second Year: 10 B, English, commercial, arithmetic, shorthand, bookkeeping, typewriting, industrial; 10 A, English, commercial law, bookkeeping, office practice, shorthand, typewriting.

Brookline, Mass. A new electrical equipment has been installed in the chemistry and physics departments of the high school at a cost of \$4,000. The equipment has been provided for educational purposes and for the lighting of the building.

Tecumseh, Neb. The school board has provided for instruction in spelling in the high school. The action was the result of a report made recently declaring that high school students could not spell.

The school board at Colorado Springs, Colo., has removed trigonometry and college algebra from the high school course. The study of French will cover two years instead of one, as formerly.

Kewaunee, Wis. The board of education has prepared a two years' course for those pupils who do not finish the required studies.

TRUANCY.

Knoxville, Tenn. Supt. W. E. Miller will give special attention to the truancy problem this year. It is estimated that 1,400 children were not enrolled in the schools last year, the ages ranging from six to fourteen years. The state has a compulsory education law, but the city is unable to enforce it because of the lack of a truant officer.

Watertown, N. Y. Only legitimate excuses for absences will be accepted by teachers this year. A new ruling of the compulsory division of the state department of education requires teachers to make monthly reports of all illegal absences. These cases will then be reported to the truant officer and then handed by him to the superintendent. After passing the superintendent's office the cases will be taken in charge by the juvenile court. It is expected that the new procedure will make a reduction in truancy cases.

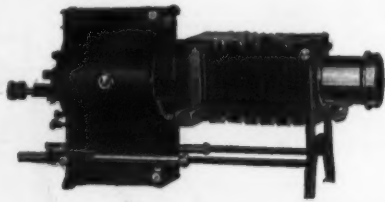
The school board of Cherryvale, Kan., has adopted a resolution making each member a truant officer without pay.

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COMING CONVENTIONS.

Oct. 14-15. New York State Council of Superintendents at Albany. W. H. Ryan, Ossining, secretary.

Oct. 18-19. New Hampshire Teachers' Association at Manchester.

Oct. 18-19. Northwest Wisconsin Teachers' Association at Eau Claire. W. A. Clark, Eau Claire, secretary.

Oct. 22-25. Northern California Teachers' Association at Sacramento. Naomi Baker, secretary.

Oct. 23-25. North Dakota Educational Association at Grand Forks.

Oct. 23-25. Maine Teachers' Association at Portland. L. E. Moulton, Auburn, president.

Oct. 24-26. Vermont Teachers' Association at Rutland. Amy B. Drake, St. Johnsbury, secretary.

Oct. 25-26. Southeastern Ohio Teachers' Association at Portsmouth. S. H. Bing, Rio Grande, president.

Oct. 25-26. Northern Illinois Teachers' Association (western section) at Freeport. H. B. Hayden, Rock Island, president.

Oct. 25-26. Northeastern Ohio Teachers' Association at Cleveland.

Oct. 25. Connecticut Teachers' Association at New Haven and Hartford. Wm. E. Parker, Ridgefield, secretary.

Oct. 26-28. Southeastern Missouri Teachers' Association at Cape Girardeau. Supt. Louis Thellman, president.

Nov. 6-8. Nebraska Superintendents and Principals' Association at Omaha. Dorothea Kolls, Grand Island, secretary.

Nov. 7-8. Kansas Association of Mathematics Teachers at Topeka. W. H. Andrews, Manhattan, president.

Nov. 7-9. Wisconsin Teachers' Association and Mathematical Teachers at Milwaukee. Miss Katherine Williams, Milwaukee, secretary.

Nov. 7-9. Missouri Negro Teachers' Association at Springfield. V. E. Williams, Farmington, secretary.

Nov. 7-9. Indiana Town and City Superintendents' Association at Indianapolis.

Nov. 8-9. Pennsylvania Superintendents' and Principals' Association at Lock Haven. I. N. McCloskey, Lock Haven, president.

Nov. 25-27. New York State Teachers' Association at Buffalo. P. G. Bugbee, Oneonta, president; Richard A. Searing, North Tonawanda, secretary.

Nov. 25-27. Colorado State Teachers' Association at Denver. W. W. Remington, Denver, secretary.

Nov. 28-30. Southern Education Association at Louisville, Ky. W. F. Feagin, Montgomery, Ala., secretary.

Nov. 28-30. National Council of Teachers of English at Chicago, Ill. J. F. Hasic, Chicago, Ill., secretary.

Nov. 28. County Superintendents of Southwest Missouri at Springfield. E. H. Newcomb, Neosho.

Nov. 29-30. Southwestern Indiana Teachers' Association at Evansville. F. S. Morganthaler, Rockport, president.

Nov. 29. Massachusetts State Teachers' Association at Boston. N. G. Howard, Hingham, president.

Nov. 29-30. Southwestern Oklahoma Teachers' Association at Lawton. A. A. Rogers, Frederick, secretary.

SCHOOL SUPPLIES.

Omaha, Neb. Following an audit of the books of the school board, the expert suggested several changes in the method of accounting. This was shown to be necessary as it was found that there was an available balance of \$332,918.11 instead of a deficit of \$80,000.

In one instance he pointed out that in making up the pay roll too much information was given, which necessitated four days' hard work ten times each year.

Charge and freight expenses have been charged to a cartage and freight account along with personal expenses. A separate account to cover personal traveling expenses was advocated.

It was suggested that unsolicited warrants held longer than five years be destroyed.

Los Angeles, Cal. The board of education has adopted the recommendations of a committee appointed to devise a method of recording the supplies purchased for the schools. The following is the plan adopted:

Upon the receipt of goods from firms, the supply department attaches the prices to the same, and triplicate bills are made for each school or de-

partment which is to receive goods. One bill is reserved by the supply department, one is sent to the auditor and the third accompanies the goods delivered to each principal.

On receipt of bills the principal makes his report to the auditor on a form provided, showing the amount of goods received. This makes it possible to verify bills on file in the supply department.

Principals receiving goods direct from firms must receipt duplicate purchasing orders and forward the same to the supply department. After the duplicate order is received, triplicates are made from the same, and duplicates are sent to the auditor's office. The duplicate purchasing order must be signed by the supply department before any demand can be passed by the auditor.

All goods ordered from, and delivered by, firms, also all goods sent direct to the schools, will be charged to the warehouse by the auditor. When shipping bills are received from the supply department, they are verified with the principal's report. The warehouse is then credited and the respective schools charged with the total amount of the bills. After the schools have been properly charged, the amount outstanding against the warehouse, indicates the actual amount of stock on hand.

This system will show the outstanding indebtedness and the actual cost of maintaining each school long before the firms have been paid for the shipment.

Repair supplies in charge of the foreman are handled in the same manner. Each order signed by him must take the usual course to the supply clerk for checking and billing. In this way the principals know the amount and price of school and repair supplies charged to their schools.

The supply department is required to prepare, once a month, a statement of goods received from firms, including in the same, goods delivered direct to the schools. A similar statement of goods delivered and billed for the different schools must be made by the auditor. The statements must be presented to the board the second Monday of every month.

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Education—Forward or Backward?

IF THE SCHOOL does not offer a proper corrective sanitary influence and education, what about the future of the children born and reared in homes such as are pictured here? The pictures are none too pleasant—but they are true to life, and represent a condition which causes serious minded persons to shudder and attempt to find a remedy.

The School has no jurisdiction over the home, but it has over the children of these homes, and failure to make use of it means something serious omitted from their education.

The leaders of civic movements which concern the poor say, "Teach a man to be clean and you have accomplished the first step in uplift work." But why leave this part of education to the time when men must be reclaimed? Teach them when they are children and it will not be necessary when they are men and women.

The first step in the sanitary education of the child is, of necessity, a thoroughly sanitary school building. The second and succeeding steps consist in the practical teaching of sanitation and hygiene. The result of such teaching is too obvious to require comment.

We have books on plumbing, water supply, ventilation, sewage disposal and sanitation, which we will gladly lend to any School Board member or teacher who wishes to study the subject.

The text matter is set forth clearly and abundantly illustrated, and can be understood by any person with but little or no previous knowledge of the various subjects.

The titles of some of our books are "History of Sanitation," "Principles and Practice of Plumbing," "Plumbing Plans and Specifications," etc. These books contain no advertising and sell at from \$1.50 to \$3.00 each. For the purpose however of disseminating knowledge on sanitation and hygiene, copies will be loaned to School Board Members or Teachers without charge or obligation to purchase. We live to learn—these books help to learn to live.

The "Standard" General Catalogue "P" (676 pages) is possessed by Plumbing Supply Dealers, Architects, Plumbers and Sanitary Engineers as well as all "Standard" Showrooms and Offices. A half hour's study of it will in itself constitute an education in sanitation.

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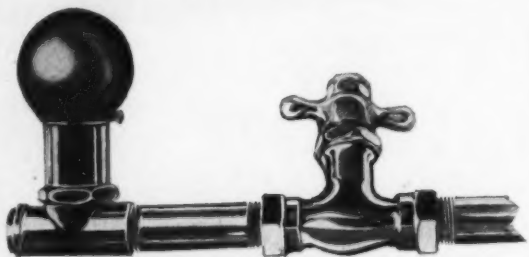
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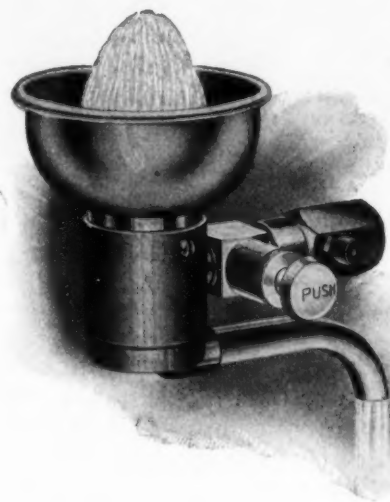
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MILWAUKEE, WIS.

OUT OF THE DAY'S WORK

St. Joseph, Mo. A new system of registration has been adopted at Central high school. The pupil fills out his card of prospective teachers and presents the slip to a clerk, who gives him a ticket for each study hour. There are a certain number of tickets for each class and when all are gone the classroom is considered filled and the pupil is assigned to another class. Each pupil receives as many tickets as there are recitation periods, which makes possible the accountability of every minute of the time. The new arrangement was devised by the principal and has proven valuable to the faculty.

North Attleboro, Mass. Five courses of study have been offered in the high school for the purpose of giving students a choice of courses rather than subjects. In making up the courses the superintendent had five groups in mind. The groups are as follows:

First were those who expected to attend school beyond the high school age. Among these people are those who expect to go to college, those who will attend a technology school, and those who will attend normal schools.

Another group is that made up of those pupils who because of conditions over which they have no control cannot attend school beyond the high school period, but who feel the need for the cultural training which comes from high school education.

Another group is that made up of those who are uncertain as to the possibilities of further education and as to their own future career.

The fourth group is made up of those who know their high school education must fit them to do something in the world. In other words, they need work which tends to be vocational and which will assist them in that vocation.

A fifth group of persons desiring high school education are those who cannot attend high school more than one or two years.

A two-year clerical course has also been provided.

Waukegan, Ill. The making of small and complete houses has been planned for the course in manual training this year. It is planned that boys who finish the course shall be ready for the contractor's trade should they desire to enter that occupation.

St. Paul, Minn. A special "coach" teacher has been appointed for pupils of the Central high school. All those who are behind in their school work will be collected into one class for special instruction for the removal of these deficiencies.

The school board of Memphis, Tenn., has rescinded its former action in regard to free lead pencils and pens for school children. The board found that the cost of these supplies for the 18,000 children enrolled would be far above what they would be willing to pay and decided that the money could be used to better advantage. Free erasers will be furnished.

Cleveland, O. The course in geography and history will be supplemented by the use of historical maps and charts of the world. These maps and charts are distributed to each school in the city. Among the features shown are changes of history in geographical conditions, acquisition of new territory, treaties and the several American wars. New maps of Ohio will also be furnished.

According to the records compiled by Assistant State Supt. J. B. Borden of Wisconsin, there were 161 rural schools condemned during the past two years. If buildings are not improved according to the standard fixed by the state department of education the aid provided by the state may be withheld until such a time as the same shall be made adaptable to school use. No cases of failure to respond to the orders of the state department have been reported up to the present time.

Grand Forks, N. D. A labor exchange will be

inaugurated in connection with the Associated Charities of the city for the purpose of securing work for girls who wish to help pay their expenses while attending school.

Columbus, O. Half-work and half-play in the first grades of four buildings will be given a trial this year. The work has been so arranged that all teachers will have classes during the entire day.

The Indiana schools have inaugurated semi-annual examinations. Promotions at the end of the year will be based upon class work and examinations.

The school board of Newburyport, Mass., has considered the passage of a rule barring children under six years of age from entering the school. The board was of the opinion that many children are too young to grasp the work prescribed and consequently they are left over for a second year.

The school board of Amesbury, Mass., has ruled that all pupils who have not reached the age of six at the opening of school must defer their entrance into the primary grade until next year.

Pittsburgh, Pa. The course of study for the elementary schools has been changed. The work has been arranged so that grade pupils can do all their studying during school hours. This removes the necessity of taking books home with them. All subjects will be made more simple and more logically arranged.

Philadelphia, Pa. A savings bank will be conducted in connection with the postal savings banks.

The state labor commissioner of Michigan has given superintendents of the state warning that the granting of work certificates to children under the legal age must stop. It is claimed that the permission is given carelessly and by incompetent persons.

Buffalo, N. Y. The largest playground in the city has just been opened. It is known as the Lincoln playground. It has a two-story field-house, containing a gymnasium, running track and assembly hall, besides baths. The house will be used chiefly in the winter.

A new law, which obliges the substitution of paper towels for the old-fashioned roller towels in public schools in the state of Massachusetts, went into effect June first.

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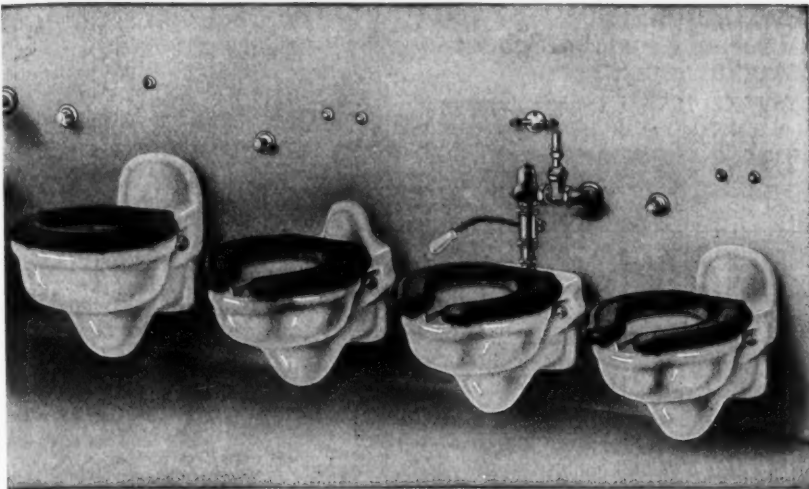


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BOOK REVIEWS.

Introductory American History.

By Henry E. Bourne and Elbert J. Benton, Western Reserve University. 264 pages. D. C. Heath & Co., Boston, Chicago.

A small introductory American history, claiming to be after the plan of the Committee of Eight and intended for seventh grade pupils. The text is simple and understandable, but we certainly do not like the following paragraph from pages 80-81: "A few years before the Jewish kingdom became a Roman province there was born in a village near Jerusalem a child named Jesus. After he had grown to manhood in Nazareth he gathered about him followers whom he taught to live and act as is told in the books of the New Testament. This was the beginning of the Christian religion. * * *

Are the authors afraid to acknowledge the divinity of Christ, which is the keynote of the arch of all mediaeval and modern history?

Mouth Hygiene.

By John Sayre Marshall, M. D., Syracuse University. 262 pages. J. B. Lippincott Co., Philadelphia.

A great deal has been said and written of late years about the necessity of the care of the teeth, and one of the good signs of the times is that many dentists in many cities are giving of their time and skill to the examination of school children and to the propagation of correct mouth hygiene. The present work is intended not only for the dental profession but trained nurses, school teachers, sanitarians and the public generally, and is written in an untechnical manner. The medical and dental professions and thinking men generally are becoming more and more alive to the evils of mouth sepsis and its connection with public health, intellectual progress and good citizenship. It is to be hoped that this little work will help to arouse a greater interest and enthusiasm in the subject of mouth hygiene, for undoubtedly preventable oral disease, if uncorrected, lead to invalidism, immorality, drunkenness, crime or insanity.

The Westward Movement.

By Charles L. Barstow. 231 pages. Price, \$0.50, net. The Century Co., New York.

Century Readings in United States History is a series made up from the best on this subject in

the Century and St. Nicholas, for students in the upper grammar grades and the first year of high school. The Westward Movement is one of this series and contains contributions from some dozen prominent writers, such as Theodore Roosevelt, Emerson Hough, Noah Brooks, E. V. Smalley and Ray S. Baker. From Archer B. Hulbert's "Historic Highways" are taken two chapters: "Early Western Steamboating" and "Boone's Wilderness Road."

Current Educational Activities.

By John P. Garber, Philadelphia, Pa. 387 pages. J. B. Lippincott Co., Philadelphia.

This is a report upon education throughout the world, being the 1911 volume of "The Annals of Educational Progress." The author of this volume is John Palmer Garber, Ph. D., associate superintendent of public schools of Philadelphia, and the book is edited by Martin G. Brumbaugh, A. M., Ph. D. It is, as its name indicates, a resume of the activities along educational lines, especially in this country, and deals with the year's aspect regarding educational matters, and embraces a wide field, perhaps too wide to be more than discursive. There are so many subjects touched upon in this report that it would be practically impossible to enumerate them. The work realizes the new condition of affairs and that new ideals and new methods are prevalent, but recommends a prudent caution and a trying-out before new things and new ways are adopted. This ninth volume of the series should appeal to school superintendents and supervisors.

Brown's Valley Forge.

By A. J. Demarest, Hoboken, N. J. 114 pages. Christopher Sower Co., Philadelphia.

A little volume of only 114 pages, including a preparatory note to the teacher, a biographical sketch of the orator, a chapter on the place, Valley Forge, and another, The Occasion. A great part of the pages is filled with valuable footnotes for the benefit of the student who is studying the text of the oration. There are some very suggestive and useful questions at the end of the book. We can recommend this book to both teacher and the student of oratory.

OPEN-AIR SCHOOLS.

Toledo, O. An open-air school accommodating fifty pupils has been erected. The building cost \$7,000. A fresh-air room has also been opened

in one of the school buildings. It will provide accommodations for twenty-five children.

Minneapolis, Minn., Pittsburgh, Pa., and Richmond, Va., have requested the use of the plans of an open-air school recently erected in St. Louis, Mo.

Milwaukee, Wis. An open-air school has been opened for delicate children and those predisposed to tuberculosis. In addition to the regular schoolroom, a small room has been provided which can be heated in cold weather for those who become too cold for comfort.

Youngstown, O. Medical inspection on a large scale will be attempted for this year. Four inspectors and a specialist have been appointed. During the past year only one inspector and two nurses were in charge of the work.

Grand Rapids, Mich. A donation of \$1,000 has been offered the board of education for the establishment of an open-air school for the primary grades. It is proposed to use the money advanced for the equipment and construction of the building. The teacher will be provided by the school authorities. A supply of fresh milk has also been volunteered.

Louisville, Ky. An open-air school has been opened. Equipment has been ordered for the building.

Springfield, Mass. Open-air instruction will be continued this year. Additional rooms will be provided as the requests are received by parents.

An open-air school for sickly children was conducted the past summer at the annex to Grammar School No. 29 in Brooklyn, N. Y. The children ranged from five to sixteen years of age.

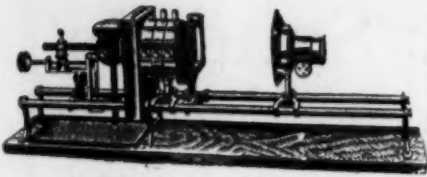
A children's pavilion and open-air school has been erected at Iola Sanatorium in Rochester. Tubercular children will receive instruction while undergoing medical treatment. The work covered makes up for time lost while absent from the regular school.

San Diego, Cal. A four-room open-air school has been provided for Normal Heights. The school seats 200 persons and cost \$10,000.

Harrisburg, Pa. An open-air school for tubercular children has been opened.

New Britain, Conn. An open-air school has been provided near the high school building. The location enables students of the domestic science classes to prepare the food and carry it to the children attending the school.

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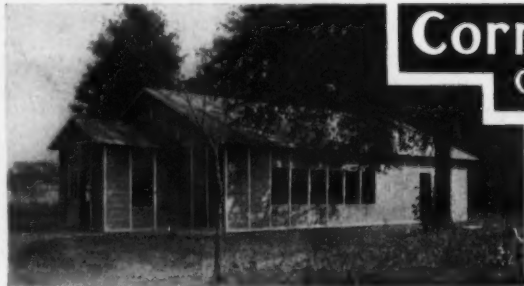
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SALARIES.

New Schedule at Cheyenne.

The school board at Cheyenne, Wyo., has adopted a salary schedule which is quite interesting. Preference will be given to teachers who are graduates of a normal school, college or university. All reappointed teachers may be advanced according to schedule on the recommendation of the superintendent and the teachers' committee, but no advancement shall be more rapid than the schedule provides. New teachers are appointed as the above outlined and shall be credited with not more than two years' experience. Teachers employed for supervision may be granted additional compensation as the board may see fit, the amounts to be paid in separate warrants. Principals of ward schools shall be paid \$120 a year in addition to the salary of a teacher and shall also receive \$30 for every room above eight in the building.

Teachers are divided into seven classes. The first class includes those without teaching experience except that of the practice school. The teachers of the second class are those having one year's experience. The third class composes those with two years' experience. The fourth class includes those with three years' experience, one of which has been in Cheyenne. Those in the fifth class are those having had four years' experience, two of which have been in the city. The seventh class is composed of those having had five years' experience, three of which have been spent in the city, and the seventh class is composed of those with six years' experience, four of which have been in the city.

The salaries of grade teachers in the first class are \$55 per month; second class, \$60; third class, \$65; fourth class, \$67.50; fifth class, \$70; sixth class, \$72.50; seventh class, \$75, maximum.

Supervisors and high school teachers of the first class will receive \$85 per month; second class, \$70; third class, \$75; fourth class, \$77.50; fifth class, \$80; sixth class, \$82.50; seventh class, \$85, maximum.

Fresno, Cal. Grammar school teachers who have been receiving a maximum salary of \$1,000 a year will receive \$50 additional beginning this year.

Principals of elementary schools will be paid as follows: Principals of eight rooms or less, \$1,350; schools of from eight to fifteen rooms, \$1,600; sixteen rooms and upward, \$1,750; princi-

pals of the Washington and Emerson grammar schools will receive \$1,850. Vice-principals of schools of sixteen rooms or more will receive \$1,350, with the exception of those in the Washington and Emerson grammar schools, who will receive \$1,600.

The school board of Superior, Wis., has changed its system of paying teachers. Salaries will now be paid monthly instead of on the twelve months' plan. The action was the result of several complaints and the statement was made that the teachers should have their money when they wanted it.

Binghamton, N. Y. The school board has increased the maximum limit of grade teachers' salaries from \$500 to \$600.

Seattle, Wash. The school board has fixed the minimum yearly salary of high school teachers at \$1,020. At the expiration of seven years' experience a maximum of \$1,560 is paid.

Holyoke, Mass. The school board has ruled that women teachers in the high school shall receive \$600, with annual increases of \$50 until \$900 is reached. The same may be increased to a maximum of \$1,000 upon the recommendation of the principal and superintendent. The action followed a petition presented by several high school teachers for higher salaries.

City Attorney McKisick of Sacramento, Cal., has declared the action of the old board of education whereby it increased the salaries of the city teachers to an aggregate amount of \$43,000 legal.

The ruling of the city attorney was based upon a Santa Barbara case and dealt with the city as a school district. The increase in salaries was held to be a contract between the school district and the teachers. It was found that all but three of the teachers had signed the contract and agreed to the terms of it.

The school board of Dallas, Tex., has fixed the salary schedule for grade teachers. The schedule is as follows: Teachers of one year's experience or less shall receive \$55 per month; two years' experience, \$59; three years' experience, \$63. Increases will be given until a maximum of \$90 is reached. All re-elected teachers shall receive an increase of \$4 per month, provided that the amount already received by the teacher does not exceed \$86.25 per month. With the beginning of the year 1913 all teachers shall receive an increase of \$4 per month to the maximum monthly pay.

Norwich, Conn. The following schedule of

maximum salaries has been adopted: Kindergartners, \$600; assistant kindergartners, \$250; teachers of grades two, three, four and five, \$650; teachers of grades one, six and seven, \$700; eighth grade, \$750. The minimum salary was fixed at \$450 for those without experience. An increase of \$40 is provided until the maximum for the grade is reached. Principals of four-room buildings and over shall be paid \$50 extra.

Mingo Junction, O. The school board has adopted a salary schedule for teachers who are employed for the regular school year. Those who fill unexpired terms are not included in the schedule. The following provisions have been made:

Teachers shall begin at a salary of \$40 per month, with increases of \$2 per month until they receive \$60 per month.

Experienced grade teachers are paid according to experience previously acquired. Credit will be given for college and normal school work and one year of experience will be credited for a year of travel.

South Omaha, Neb. The school board has revised the salary schedule. Teachers with one year's experience or graduates of the normal training school shall be paid \$50 per month, with increases of \$5 per month until \$85 is reached. Teachers who have not previously taught in the local schools shall be eligible for the \$5 increases, but may not receive a salary above \$70 for the current year nor more than \$75 for the year 1913.

The following schedule applies to principals: Buildings of three rooms or less, \$80; buildings of four or five rooms, \$85; buildings of six or seven rooms, \$90; buildings of eight or nine rooms, \$95; buildings of ten or eleven rooms, \$100; buildings of twelve or thirteen rooms, \$105; buildings of fourteen or fifteen rooms, \$110; buildings of sixteen or nineteen rooms, \$115.

Mt. Vernon, O. The school board has granted an increase of \$25 per year to elementary teachers and \$50 to primary teachers.

Norristown, Pa. The teachers have been granted increases ranging from \$25 to \$50 per year. The principal has been allowed an annual increase of \$75.

Quincy, Mass. An evening school for foreigners and an industrial course will be introduced in the fall.

A Bubbler that Bubbles



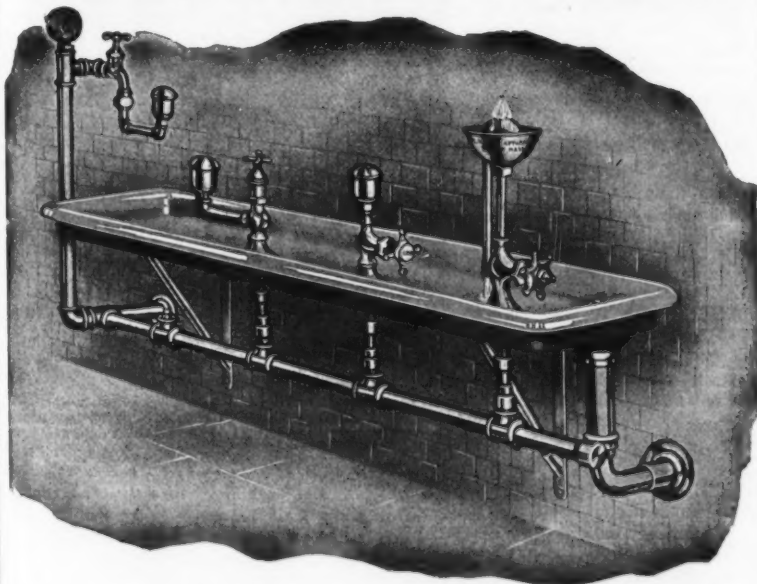
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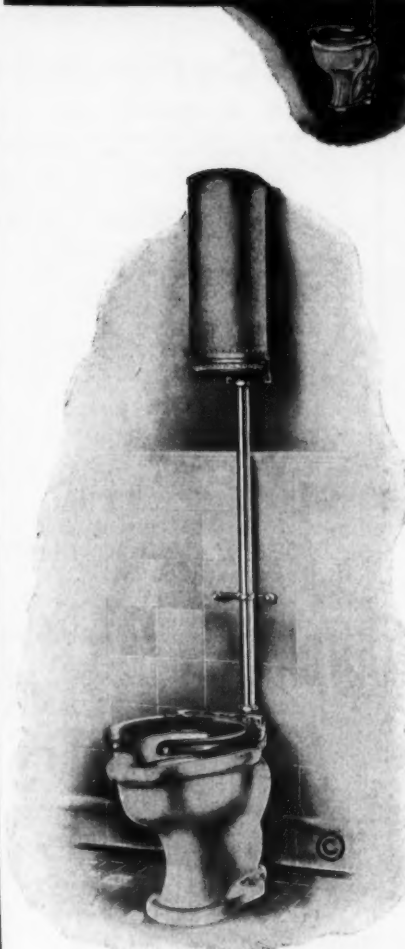
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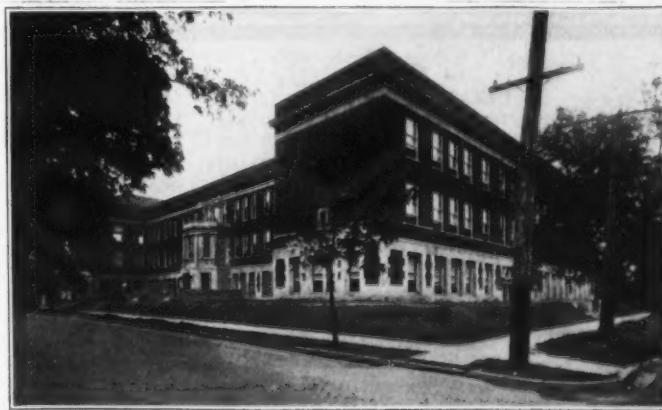
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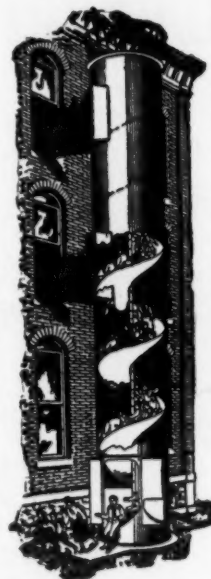
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SCHOOLROOM DECORATION

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LEGAL.

The right of charter cities to regulate their own school affairs has been sustained in every point by Judge Ames of the Supreme Court of Oklahoma.

The decision is the result of a mandamus suit brought by the charter school board against the former members of the Oklahoma City board of education to compel the turning over of the records of the board. The case was appealed to a higher court to determine the constitutionality of the act of 1910 relative to this question.

The attorney general of Michigan has ruled that members of school boards cannot hold offices such as supervisor, clerk or justice of the peace. The practice is contrary to the state school laws.

Attorney General West of Oklahoma has declared that the repetition of the Lord's Prayer in the schools is not a violation of the provisions which require complete religious tolerance. The opinion was given at the request of Supt. A. V. Hamilton of Coalgate, where a controversy was in progress regarding the repetition of the prayer in the schools.

The Indianapolis board of health has closed the public playgrounds and all work on such grounds has been postponed pending an opinion from the city attorney as to whether the law can compel the board to permit the use of the same grounds for white and colored children. In case both are entitled to the use of the grounds, it is expected that all playgrounds will be abandoned this year.

As a result of the operation of the Pennsyl-

vania school code, which makes the financial year begin with the first Monday of July, the school appropriations will be made a month later. Coincident with this change, the distributions to districts in the state of Pennsylvania, which file the required reports with the state department of education, a new system of calculating the allotment to each district will be made. Formerly the appropriation was based on the number of taxable inhabitants. In the future, however, the number of children and teachers will be alone considered.

City Solicitor E. H. Vaughan of Worcester, Mass., has rendered an opinion to Superintendent H. P. Lewis, in which he declares it illegal for the school boards to rent outside rooms for school purposes when no emergency or condition of affairs exists which could not have been anticipated before the annual appropriation was made.

In explanation of the decision, Mr. Vaughan says in part, that an emergency would exist if a building had been destroyed by fire in the middle of the year, or if the same had been burned before the appropriation was made up. In that case, an appropriation might legally be provided for a suitable place for a school. In summing up, Mr. Vaughan stated that in the present local case, nothing was said as to a condition which could have been foreseen at the time of the annual appropriation, and, therefore, there was nothing which would authorize the school committee of Worcester, even with the approval of the mayor, to rent rooms or buildings for school purposes.

Topeka, Kans. The Supreme court recently held that islands in Kansas streams, which have been declared navigable by the federal government, are school lands and open to settlement the same as other land in the state.

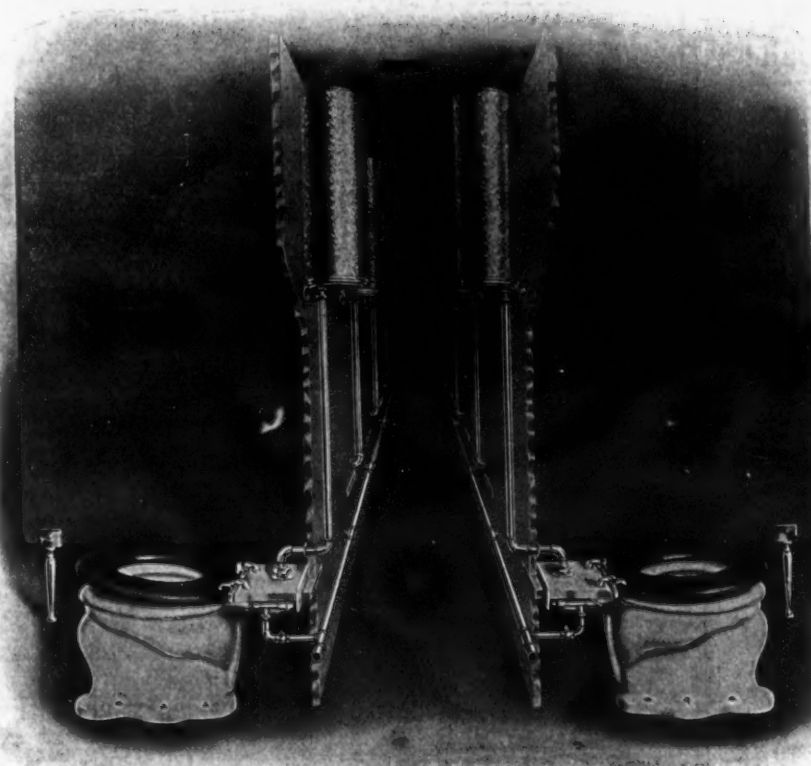
The attorney-general of Washington has recently rendered an opinion in which he states that the law requiring the names of candidates for the office of county superintendent placed on the ballot before he has filed a certificate refers to the general elections and not to primary elections. The requirement was made to ascertain the experience of the applicant.

Bids for school property in the townships of Ohio, which have been abandoned under the working of the consolidated school plan, may be declined if too low, and may be sold at auction, according to an opinion rendered by Attorney-general Hogan. The opinion was given in response to a request of State Superintendent F. W. Miller who requested advice on the subject.

A slight accident occurred in Joliet, Ill., and the school board requested an opinion. The opinion, of course, relieves all board members and the board itself from any liability for damages in case of accidents to pupils. Undoubtedly the ruling is old, and still it deserves repetition.

Grand Junction, Colo. The school board has prohibited secret societies in the high school and has given notice that admission to the school will be denied to any fraternity or sorority member who may apply.

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Nelson Closet Stall with Utility Chamber

are wanted in school toilet rooms. Everything must be guaranteed to stand the heaviest kind of wear and tear.

Accessibility

is a feature so often forgotten. If every part of your plumbing can be got at you don't waste money for repairs and troubles.

The Utility Chamber

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THE EDUCATIONAL SIDE OF THE SCHOOLSHOP PROBLEM.

(Concluded from Page 11.)

from a knowledge of principles rapidly broke down tradition and trade formulas and made mind the arbiter of all mechanical processes.

That something new had actually been discovered is also indicated, not only by the many achievements of Henry Mandslay, but also by the marked achievements of the workmen trained by him. He not only worked out something new and in advance of others, but made it sufficiently tangible to be imparted to others. He was not only the first successful student of mechanical science, but also the first teacher of mechanical science. This workman who surpassed all others of his day, yet not having passed the usual years of apprenticeship, possessed something that he could pass on to others that would make them leaders of their time as he had been of his.

Today one of the best guaranties of excellence in mechanical work is the fact of having been trained by one of Henry Mandslay's pupils, or by one of their successors. Preceding the invention of the slide rest began a new order in the working of solid materials, and this new order has developed into a special type of workman and requires for its production a special type of training. It is readily distinguished by those who have made a study of this development, but often classed by others all together as one and the same as skill or craftsmanship.

Spread to America.

This new order of industry soon spread to America where it found Evans and Whitney and a host of others ready, not only to adopt it, but also to carry it far beyond what it had been in England. We think of Whitney as the inventor of the cotton gin. This was the work of a child compared with his efforts in developing mechanical science.

We think of the sewing machine as a boon to all womankind. It was but a tallow dip to an

electric light compared with what she has gained by the development of mechanical science that the making of the sewing machine compelled. It has raised all classes of labor and pushed onward or passed all lines of human thought, until today it knocks at the doors of our educational institutions the latest great development in the realm of science. The end is not yet. More minds today are definitely at work to advance this science along new lines in this country than are engaged upon any other line of scientific investigation. More periodicals are published containing definite, demonstrated points of advance in mechanical science than any of the other sciences.

The magnitude as well as the intellectual backing behind this branch of human knowledge is beyond the belief of those who have no personal contact with it. These statements are made thus dogmatically, not that I wish you to believe because of what I say, but to cause you to put forth an effort to know of these things as their magnitude and importance demands.

(Concluded in our November Issue.)

SPECIAL STUDIES.

Cleveland, O. Supt. J. M. H. Frederick has announced that a special course in municipal government, civics and economics of municipal taxation will be added to the high school curriculum. The purpose of the course is to prepare students to become intelligent voters.

Cincinnati, O. The Montessori method in education is to be tried in the public schools. A modified system will be introduced at the oral school. The instruction is especially adaptable to the deaf children and was first used for this purpose by the author of the same.

San Antonio, Tex. Drawing and art have been retained in the school course. Provision has also been made for retardation rooms.

Marlboro, Mass. Sewing has been introduced in the schools.

Lock Haven, Pa. A supervisor of drawing has been appointed. Training will be given for the control of the eye and hand. Construction work of various kinds constituting the manual training work of the grades will also be given. The older boys will be given mechanical work.

Springfield, Mass. Nature study classes have been formed. Geological trips will be made to surrounding places of interest where there are different rock formations to be analyzed. Pupils in the seventh grade will study elementary forestry. A set of lantern slides to be used in connection with the study of forestry have been provided. The set shows different kinds of trees, wood and lumber that are furnished, the uses of forests and the different insects and fungi that injure them.

Pittsburgh, Pa. The school children are to be taught the more difficult questions of art and design. Mr. G. Valentine Kirby, director of art in the schools, has made plans for a new course. Special efforts are to be put forth in studies for the more beautiful home. Children will be taught that striped wall paper heightens low ceilings, and under certain conditions red wall paper absorbs half the artificial light in a room and doubles gas bills.

Mr. Kirby believes that more of the artistic work ought to be done in the schools of Pittsburgh, as the raw material is manufactured in the city and then sent abroad to be designed.

NORMAL TRAINING SCHOOLS.

The school board at St. Paul, Minn., has passed the rule that principals receive the names of pupils desiring to take the teachers' training school course and shall submit them to the superintendent with credits and recommendations. It is believed that this system will be the means of securing the best qualified teachers for this course.

A normal department has been added to the high school courses in the state of Iowa. The work as outlined by the state law is under the supervision of a state examiner and receives aid from the state treasury.

PENTZ LEAVES CHARLEROI.

James G. Pentz, superintendent of schools at Charleroi, Pa., has been selected by State Supt. N. C. Schaeffer of Pennsylvania for the office of State High School Inspector. Mr. Pentz has merited the confidence shown in him by Dr. Schaeffer. The high schools of Pennsylvania will soon respond to the work of Mr. Pentz.

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Safest,
Most Durable
Apparatus
Manufactured

Most Popular
Amusement Apparatus
ever invented



Used
in every
Playground

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20th Century HIGH GRADE Adjustable Drawing Tables

*Circulars showing the different styles,
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We call the attention of purchasers of School Furniture to the illustration of our Standard Adjustable desk.

We do not make monstrosities and call them School Desks. We have several new designs in adjustable desks that we will be pleased to show. We have the Best Sanitary school desks made. Write for prices and samples.

Still making the Faultless and Standard school desks. Manufacturers of silica blackboards. Goods guaranteed forever. Send in your orders and get good goods and honest treatment.

Haney School Furniture Company
GRAND RAPIDS, MICH.

BUSINESS COURSES FOR HIGH SCHOOLS OF SMALLER CITIES.

(Concluded from Page 15.)

desirable course. First, because it prepares students for the ordinary business transactions which they must inevitably meet in life; second, because students feel that it is a practical course and are interested in it for that reason; and third, because it furnishes them a preparation which has an immediate commercial value upon graduation."

That school men should disagree about the arrangement of subjects in a course is but a sign of a desirable difference in personalities. That they should not agree on the intensity of the work done in the major subjects of the course that make it a business course is not so satisfactory. For example it is not futile to assume a pupil can acquire a good knowledge of bookkeeping taken five periods a week for one year, and is it not further complicated if that one year is taken at or near the beginning of the course? It is my belief that if but one year's work is to be done in bookkeeping the subject should be scheduled in either the third or fourth year of the course, and that two periods each day, five days each week, should be devoted to the subject under the direct guidance of the teacher. I further believe that stenography and typewriting should be studied at least two years and that usually they should be credited as one subject, with satisfactory work required in each branch to entitle the pupil to credit.

A Proposed Course of Study.

It is difficult, I know, to offer a course that will be at all agreeable to schoolmen. I therefore propose a course with considerable trepidation.

1. The course should be four years. More emphasis should be laid on sending from the schools graduates well qualified, both from the

standpoint of culture and business efficiency. A wider knowledge is needed by clerks and business men than that indicated by mere ability to write legibly, spell glibly and do bookkeeping neatly.

2. The course should be planned so that it will not be regarded as a snap course. The teachers planning commercial courses have frequently left themselves open to the charge of conducting courses for the mental "lame ducks" by acquiescing to a shifting from the college preparatory course to the business course of those that have been failures in the college preparatory, or really making the business course so easy that it has undoubtedly been a snap. The business course ought to offer as strong a training as does any other course in the curriculum.

3. If writing is not made a separate and special subject it should be carefully taught in connection with all the written work of the department. Poor writing should be discouraged at all times, and doubly so in the business department.

4. Here is offered in outline a suggestive course, the figures following the subjects indicating the number of forty-five minute periods per week that should be devoted to each subject:

(See Table Page 15.)

"El." stands for elective.

If third year modern language is elected, it should be carried in fourth year.

If the mathematics is elected in fourth year it presumes a previous election of plane geometry.

Four subjects should usually be carried each semester.

I believe that the course above outlined is sufficiently strong to well prepare pupils for the work expected of the course. The purely commercial branches are interspersed with subjects gen-

erally informational and cultural in character. The amount of time that is devoted to the major subjects of the course seems sufficient. Naturally the success or failure of this course, as in all teaching, rests largely with the teacher. If the teacher is earnest, sincere and faithful, and, above all, requires exact and neat work of his pupils, the course ought to be able to train boys and girls effectively.

SECRET SOCIETIES.

Portland, Ore. The school board has made preparations for decided action against the fraternities still existing in the high school. The state has a law on its statute books making these societies illegal and the school board will act according to the provisions of the law. The societies have no connection with national organizations and are merely local in their nature.

Long Beach, Cal. Students of the polytechnic school are required to sign a statement that they are not members of a secret society and will not become members of such an organization.

Meadville, Pa. The school board has passed the following rule to govern secret societies:

No pupil of the high school shall be a member of any secret society or organization. Any pupil known to be a member of such society or organization, and refusing to withdraw therefrom, shall be dismissed or otherwise disciplined.

St. Joseph, Mo. Secret societies have been banished from the high school.

The school board at Johnstown, Pa., has ruled that all pupils entering the high school must sign a written statement that they are not members of a secret society and that they will not become members during the school year.

Supt. Wm. N. Smiley of Denver, Colo., has prepared for a continuation of the war on fraternities. He is in full accord with the views of his predecessor, Charles E. Chadsey, and will follow out the policy adopted by the latter.

Saginaw, Mich. The school board has ruled that all freshmen students of the high school must sign a pledge that they are not members of any fraternity nor intending to become affiliated with them. The action is in accordance with the state law which has recently become effective.

THE PERFECT SCHOOL PENCIL

No. 365
Drawing

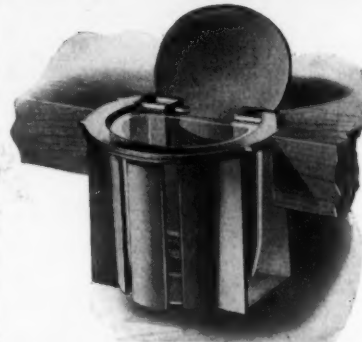


The LEAD IS GRITLESS; DURABLE; UNIFORM.

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Cleveland inkwells are superior to other inkwells. The only steel inkwell made that can be inserted absolutely flush with the top of the desk without counter boring. Low in price. Substantially made. Handsomely nickel plated, and improves the appearance of any desk.

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Folding Chairs



DRINKING FOUNTAINS FOR EVERYBODY

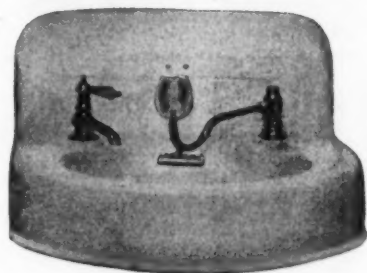
Sanitary and economical Fountains for country as well as city children. Usable by large as well as small pupils.



For Schools having no Water Pressure, or using Spring Water



No. 3. Closes Automatically



No. 1 for Lavatory Bowl



No. 2 for Recessed Wall Basin

Hamrick-Tobey Fountains fill all conditions, and can be adjusted to any plumbing.

Thirty Days' Trial Free. Special Price to Schools.

HAMRICK-TOBEY CO., Wausau, Wis.



SELF-CLOSING
NON-POLLUTABLE
SELF-DRAINING
SANITARY

At Last

THE RIGHT DRINKING
FOUNTAIN FOR
SCHOOL YARDS

The **MURDOCK**
"BUBBLE-FONT"

The only drinking fountain on the market really suitable to be installed in the open air.

1st—Because it is *anti-freezing*. Drains itself automatically after each drink to point below frost line.

2nd—Because the children cannot squirt each other with it.

3rd—Because water cannot stand in the fixture to become stagnant.

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CINCINNATI, OHIO

MAKERS OF THE MURDOCK HYDRANT THAT HAS BEEN USED IN SCHOOL YARDS SINCE 1863

Write for Booklet

SOCIAL ORGANIZATION IN THE HIGH SCHOOL.

(Concluded from Page 14)

New Rich, our boys and girls must come into their rightful heritage of noisy joy and merry work in the spirit of play.

The Practical Solution.

For all of these occasions the young people will do their own decorating and serving and subsequent housecleaning. I know this is not impossible, for I saw the third-year girls in St. Paul High School eagerly grasping at the chance to wait upon the graduating class at their last banquet. Indeed the waiters in the cafe of this high school are all of them high school girls of the very finest type, who receive nothing whatever, not even food, in return for their splendid service. Those young ladies are many of them from very affluent homes. All of them, the brightest and the slowest, the richest and the poorest, are the instruments and the beneficiaries of a fundamental social education. But it is not hard to shut your eyes and see the shocked face of some dear mamma of the mu mu mu variety as she indignantly exclaims: "No one shall ever make a daughter of mine do such a thing."

Just so, dear lady. No one in the new high school would ever attempt it.

But the cleansing waters of unselfish service flow most freely for boys in the games of the field and gymnasium. Manners are a fine art, considered as a way of living. Literature and history are a manual of manners. However, few boys will take a grandfather's advice, or profit from his experience. Therefore, literature and history unapplied do not suffice. First hand condensed social experience is had on the athletic field. Athletics is a moral life laboratory.

Everywhere in America some kindly lady with a mission in life must needs arise and view with alarm the "brutalizing effects of the dangerous games still criminally countenanced by high school authorities." But the vigorous sports of youth, now properly supervised and co-

operated in by the teachers, still cleanse the blood and tone the will, subdue the temper, and string up the attentive powers of the finest boys in the English world.

Still, they stand the most persuasive life influence, the most appealing school memory, and the most powerful guarantee of social democracy in all our high schools. Because of them, there is hope that the American boy of tomorrow may keep his boyish simplicity of thought and action long past age when his brother of yesterday had become a wearied and wearisome man of the world. Any teacher in Harrow or Eton who succeeds, or remains at all, must consciously consider his most important work to be his active, happy, volunteer participation in the sports of the boys. There unconscious life tuition holds most perfect sway. And in the long run, character and not scholarship is the finest fruit of the high school.

It ought surely to be unnecessary to plead for recognition of the social needs of modern high school communities. Negative action is not enough. Boards of education must provide necessary facilities for homelike school life, and school officials must properly value the work of teachers outside their classrooms, if the American high school is to completely recover from the effects of the social plague of Greek letteritis.

PUPIL REQUIREMENTS.

The school board of Joliet, Ill., has passed the following rules regarding pupils:

No pupil under six years will be admitted.

No pupil admitted without evidence of vaccination or certificate of good health.

Pupils destroying property will be liable to suspension, fine and punishment.

Any pupil exposed to contagion must have certificate of health before re-entering schools.

Pupils absent without cause shall be debarred from promotion until a full explanation is rendered.

Pupils carrying firearms or other weapons will be suspended.

Pupils coming without proper personal attention to cleanliness shall be sent home.

Pupils are under the jurisdiction of teachers

going to and coming home from school.

The school board of Allentown, Pa., has recommended that pupils who are able to complete their work in a shorter time than required be allowed to do so.

All pupils who attended last year must change sessions.

To avoid congestion and confusion pupils who attended last year must come to enroll in the forenoon only, if they are to belong to the forenoon session, and in the afternoon only if they are to attend the afternoon session.

New pupils from local ward schools or from other towns must bring diplomas or certificates.

THE ORGANIZATION AND ADMINISTRATION OF RECREATION AND SOCIAL CENTER WORK.

(Concluded from Page 10)

should be naturally determined by local conditions. Every impulse in the right direction should be gratefully accepted, whether it leads to the establishment of a playground, a social center, or a new city plan. Nevertheless it will aid thoughtful citizens in wisely directing and moulding these tendencies to appreciate their inner meaning, and the conditions of the problem as a whole. It will prevent them from confounding temporary expedients with permanent organization and administration.

To educational authorities the recreation movement appears to present both a warning and an opportunity. The warning is to be found in a report by an able committee upon this very subject, which says that a recreation commission is to be preferred, because school boards lack social insight and cannot appreciate at their real values such phases as hygiene, exercise, pleasure and informality. Without mental alertness, school boards will soon awake to find the fields of education doubled and trebled, but they not partaking of the new pastures. The opportunity which the situation presents to school authorities lies in the chance of assuming the leadership in a new movement of very large significance. Should they do so formal education will not suffer, but will, on the contrary, by reason of broader contacts, be vitalized and dignified.

WE decline to install school building heating plants which do not provide for ventilation. We are in the forefront of the movement for the "New Ventilation."

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Kansas City

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School House Architects

Carthage, Illinois

Special attention given to the proper lighting, heating and ventilation of schools. Correspondence solicited anywhere.

A handsome book of School Houses ranging from one room up (perspectives and floor plans) will be sent to School Committees that are interested in the erection of buildings for which plans have not been procured.

THE PECK-HAMMOND CO.

Heating and Ventilating Engineers

CINCINNATI, OHIO

Are prepared to furnish any system of heating and ventilation desired

ALSO
Automatic Flushing and Dry Closets
WRITE US



ARIZONA.

Patagonia—School now in course of construction.

ARKANSAS.

Carlisle—Bids received for school. Weather, Foley & Co., Architects, Memphis, Tenn.

CALIFORNIA.

Los Angeles—Bids received for 14-room school, 38th and Wadsworth Sts., and Boyle Heights Intermediate School. Wm. A. Sheldon, secy. Sutter—Bids received for high school; \$20,000. Mr. Kenyon, Archt., Marysville. Redlands—Bids received for one-story addition to Barton Tract School, Mission District. J. J. Curtis, clk. San Fernando—The board has advertised for plans and specifications for a library and domestic science building costing \$35,000; also a shop costing \$2,000. Fresno—Bids received for school, Garfield District. Thayer, Parker & Kenyon, Architects, Los Angeles—Archts. Allison & Allison have prepared plans for state normal school; \$600,000. San Diego—Archt. Theodore Kistner has plans for Washington school. Orange—\$50,000, bonds, have been voted for polytechnic building. San Diego—Bids received for two schools. T. C. Kistner, Archt. Oakland—Contracts will be let for seventeen buildings before January first. J. J. Donovan, Archt. Los Angeles—Contract has been let for 2-story school, Santa Barbara and Western Aves. San Francisco—Site has been selected on Washington Street for oriental school.

COLORADO.

Pueblo—Site has been purchased for grade school on College Avenue, to be erected next spring. Rockvale—Contract has been let for addition to school, Dist. No. 21.

CONNECTICUT.

Norfolk—Bids received for 12-room high school; \$60,000. E. K. Rossiter, Archt., New York, N. Y. Meriden—Bids received for 2-story high school; \$165,000. Guilbert & Betelle, Architects, Newark, N. J.

DISTRICT OF COLUMBIA.

Washington—Archt. Wm. B. Ittner, St. Louis, Mo., has been delegated to prepare plans for a high school.

GEORGIA.

Atlanta—Proposals received for 3-story high school building. Hantz & Reid, Architects.

IDAHO.

Dietrich—Proposals have been received for school. Consolidated Dist. No. 42. Wayland & Fennell, Architects, Boise. Gifford—School will be erected. Kendrick—Plans have been received for school. Soldier—Bids received for school, Dist. No. 54.

ILLINOIS.

Chicago—Archt. John Klucina has received figures for

2-story building; \$6,000. Evanston—Archt. H. J. Schlacks, Chicago, has received figures for 2-story school, Church of the Ascension. Champaign—The citizens voted \$100,000, bonds, for high school. C. D. Stephens, secy. Danville—Archt. J. F. McCoy will advertise in the spring for figures for 4-room school building; \$10,000. Rosiclare—Bids have been received for one-story school. Benld—Archt. Chas. Pauly & Sons, St. Louis, Mo., have received bids for 2-story school building; \$15,000. Chicago—Figures have been received for 3-story addition to Warren school. A. F. Hussander, Archt. Rockford—Archt. E. A. Peterson has plans for two-room school; \$6,000. Herschner—Bids received for one-story school. C. D. Henry, Archt., Kankakee. Jacksonville—Archt. C. W. Buckingham has preliminary plans for 2-story high school; \$125,000. Carlville—Archts. Rinaker & Furrow, Springfield, have plans for 2-story school building; \$50,000. Chicago—Figures received for 16-room Ryder school; \$60,000. Herrin—Archts. Spencer & Temple, Champaign, have plans for 2-story high school building; \$20,000. Charleston—Proposals received for model school and manual arts building. W. C. Zimmerman, Archt., Chicago. Centralia—Bonds, \$5,000, have been voted for school, Dist. No. 24. Chicago—Figures received for normal arts building. A. F. Hussander, Archt. Rockford—Figures received for 3-story high school. Wm. B. Ittner, Archt., St. Louis, Mo. Pekin—Archts. Hewitt & Emerson, Peoria, have plans in progress for 2-story high school, costing \$65,000; also, 12-room grade school costing \$35,000. Metropolis—Bids received for 4-room school. Reeves & Baillie, Architects, Peoria.

INDIANA.

Indianapolis—Archts. D. A. Bohlen & Son have received bids for 2-story boys' school. Selvin—Archts. C. Shopbell & Co., Evansville, have plans for 6-room school. Project delayed. La Porte—Figures received for one-story school building at Willvale; \$6,000. Geo. W. Allen & Son, Architects, Trafalgar—Bids received for 6-room school; \$20,000. Geo. Ransdell, Archt., Franklin. Young America—Figures will be received October 4 for 2-story school building; \$40,000. Griffith & Fair, Architects, Fort Wayne.

IOWA.

Danville—Bids received September 16 for 4-room school building; \$9,000. Brooklyn—\$45,000, bonds, voted for school. North English—School will be erected; \$25,000. St. Anthony—Archt. O. H. Carpenter, Iowa City, has plans for 8-room school. Epworth—Proposals received for school, Taylor Independent District. J. E. Smith, secy. New Market—Bids received for school, Dist. No. 5, Dallas township.

KANSAS.

Great Bend—Figures received for 2-story school building; \$20,000. Owen & Payson, Architects, Kansas City, Mo. Atchison—Archts. Saylor & Seddon, Kansas City, have plans in progress for 2-story Washington school; \$50,000. Corwin—Bids received for school, Union School Dist. No. 1. J. L. Colman, clk. Wellsville—Archt. C. W. Squires, Emporia, has plans for 2-story high school; \$20,000. Protection—Archt. F. G. McCune, Wichita, has plans in progress for 2-story school building; \$11,000. Milan—\$65,000, bonds, have been voted for school. Lawrence—Bids received for one-story school. Jetmore—High school will be erected.

KENTUCKY.

Hartford—Archts. C. C. & E. A. Weber, Cincinnati, O., have plans for 2-story school building; \$30,000. Paducah—Bids received for ward school on Guthrie Ave.; \$15,000. Louisville—School will be erected for St. Helen's Church next spring. Rev. John B. Peifer, pastor.



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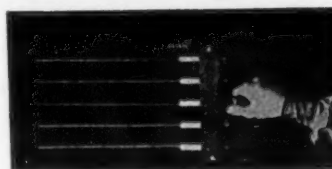
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Costs no more than cesspool or privy vault, never needs cleaning, no typhoid germs. For closet in house, or outside closet. Have your architect specify the Russell System for your school building.

LOUISIANA.

Iberville—Site has been selected for high school. New Orleans—Plans have been approved for McDonough No. 14 school.

MARYLAND.

Baltimore—Bids received for 3-story school addition; \$100,000. Clarence E. Stubbs, Archt. Archt. T. W. Pietsch has plans for 3-story state normal school on the York road; \$600,000. Frostburg—Archt. C. M. Anderson, Baltimore, received bids for school and gymnasium; \$25,000. Melville—Bids received for 2-story school; \$4,000. Baltimore—Proposals have been received for School No. 27. Two-story school and gymnasium will be erected on St. Joseph's Monastery site, Whiteford Avenue; \$30,000.

MASSACHUSETTS.

Everett—Archts. Loring & Phipps, Boston, have received figures for 2-story manual training building. Boston—Assoc. Archts. Briggs & Nelson, Cleveland, O., and Fox & Gale, Boston, have preliminary plans for 2-story school building at Shaker Heights; \$60,000. Marblehead—Archts. Peare & Quiver, Boston, have plans for school building. Boston—Archts. Mulcahy & McLaughlin have plans for a 2-story high school addition at Brighton. Figures received for 2-story elementary school, Franklin District. Archt. C. J. Bateman has plans for 2-story Mt. Hope school.

MICHIGAN.

Highland Park—\$25,000 have been voted for high school site. Building will be erected by sections; cost \$200,000. Byron—Archts. Robert Messmer & Bro., Milwaukee, Wis., have plans in progress for 2-story school building. Boyne City—Archts. Clark & Munger, Bay City, have plans for 2-story school. Vestaburg—Figures advertised for one-story school; \$7,500. Cowles & Mutscheller, Architects, Saginaw. West Branch—Figures received for 2-story high school; \$25,000. Cowles & Mutscheller, Architects, Saginaw. Muskegon—Bids received for school, Dist. No. 2. Eggleston. Berrien Springs—Bids received for 2-story school building; \$15,000. J. C. Schwerdt, Archt., St. Joseph, Mo. Detroit—School will be erected, Cass Ave. and Peterboro Street. Grandville—School will be erected. Petoskey—Figures will be received October 9 for 3-story high school; \$65,000. J. D. Chubb, Archt., Chicago, Ill.

MINNESOTA.

Olivia—Archts. Parkinson & Dockendorff, La Crosse, Wis., have received figures for parochial school; \$25,000. Florence—Contract has been let for school; \$4,000. McGrath—Bids received for school, Dist. No. 51. Nerstrand—Four-room school will be erected. Chanhassen—Archt. H. T. R. Krauss has plans for school, Dist. No. 14. Duluth—Archt. F. E. Johnson has plans for one-story school, St. Adelbert's church; \$5,000.

MISSISSIPPI.

Leakesville—An agricultural high school will be erected at Pine Level.

MISSOURI.

Afton—Figures received for 2-story school. E. Preisler, Archt., St. Louis. Centerville—Bids received for 4-room school; \$10,000. H. J. Page, Archt., Cape Girardeau. Poplar Bluff—Archt. L. B. Walker has plans for 3-story high school. Kansas City—Site has been secured for southeast high school.

MONTANA.

Medicine Lake—Archt. J. C. Woodruff, Minot, N. D., has plans for school building; \$5,000. Baker—Bids received for school building. Carter—\$4,500, bonds, have been voted for school. Crow Agency—Bids received October 4 for school at Crow Indian School.

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DRAPER'S "SANITARY" Adjustable Window Shade

Will expose all the window without dropping below the window sill. Rolls up from top or bottom. Our rollers will not run away. They are provided with a positive stop or locking device that automatically catches the roller by means of a GRAVITY hook the moment the operator releases his hold upon the bottom pull.

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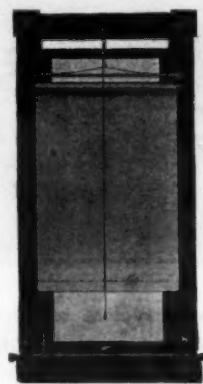


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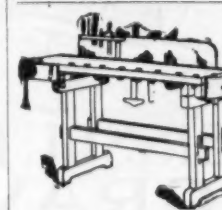
Send for a sample shade. - We prepay express.

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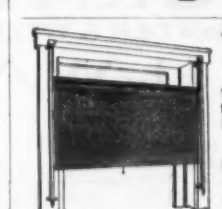
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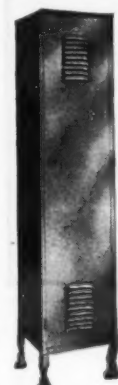
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top for upper light and venti-
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NEBRASKA.

Humboldt—Contract has been let for annex to school. Gibbon—Bids received for high school. M. N. Blair, Archt., Hastings. Thurston—Archt. J. H. Craddock, Omaha, has plans for 4-room school; \$8,000. Fremont—Bids will be received until October 14 for high school; \$125,000.

NEW JERSEY.

Leonia—Assoc. Archts. Ernest Sibley, Palisade, and W. W. Rasmussen, New York, N. Y., have plans in progress for 2-story school building; \$50,000. Salem—Proposals have been received for high school. Guilbert & Betelle, Archts., Newark—Figures received for 4-story school building; \$200,000. E. F. Guilbert, Archt., Atlantic City—Archts. Stout & Riebenach have plans for 4-story school building; \$180,000. Plainfield—Proposals received for addition to high school. Windsor—Bids received for high school, East Windsor; \$35,000. Mantua—School will be erected. Bayonne—Archts. Guilbert & Betelle, Newark, have plans for 3-story school building; \$125,000. Camden—Site has been selected for school to cost \$90,000. Bayonne—Plans have been begun for erection of two schools.

NEW MEXICO.
Silver City—Addition will be built to normal school.

NEW YORK.

Tupper Lake—Figures have been received for 3-story high school; \$40,000. Freeburg & Fidler, Archts., Jamestown. Jamestown—Figures received for 2-story grade school. Freeburg & Fidler, Archts., West Salamanca—Archt. Robinson, Cleveland, O., has plans in progress for 8-room school building; \$12,000. Southampton—Archts. Hewitt & Bottomly, New York City, have plans for 2-story high school; \$75,000. Howard Townsend, pres. Rochester—Bids received for 3-story school building. Gordon & Madden, Archts., Lockport—Archt. W. N. Smith, New York City, has plans for 2½-story high school. Fulton—Archt. J. Mills Platt, Rochester, has plans for school building; \$22,000. Archt. N. H. LaVaute, Syracuse, has plans for 2-story school building. Russell—School will be erected; \$35,000. New York—Archts. Sommerfield & Steckler have plans for 3-story school building; \$25,000. Brooklyn—Archt. F. A. Norris has plans for 3-story school building, St. Rose of Lima Church; \$88,000. Rev. James McAleese, pastor. Binghamton—Archt. E. W. Dickerman has plans for Robinson Street school. Amsterdam—The proposition carried for the expenditure of \$50,000 for school in Eighth Ward.

NORTH DAKOTA.

Center—Bids have been received for 4-room school, Dist. No. 18. F. J. V. Kiebert, clk. Binford—Bids received for school. J. D. Barclay, clk. Rainy Butte—Bids received for two schools. J. O. Johnson, clk. Sherwood—Bids received for school. A. F. Hain, clk. Antler—Bids received for school, Illinois School District No. 30. St. John—\$3,000 voted for addition to school. Scott—Bids received for school, section 25. Steele—Bids received for school, Lincoln School District. Helena—Bids received for two schools, District No. 3. Dickinson—Bids received for school, Novi Hradec District No. 13.

Egan—Bids received for school, Dist. No. 57. Adolph Johnson, clk. Kenmare—Bids received for school, Dist. No. 24. Peter Anderson, clk. Leipzig—Bids received for school, Weller School Dist. No. 56. Schaefer—High school will be erected. Carl—Bids received for school. Balfour—Bids received for school, Dist. No. 24. Mrs. O. H. Elvstad, clk. Fried—Contract has been let for school. Walhalla—Bids received for school, Fremont District. Mrs. Alex. Russell, clk.

OHIO.

East Cleveland—Five-room addition to school building contemplated; \$25,000. Cincinnati—Archt. A. Kunz has plans in progress for 2-story school building; \$25,000. Columbus—Archts. Richards, McCarty & Bulford have plans for 6-room school building; \$15,000. Figures received September 1 for 16-room school at Crestview; \$125,000. Toledo—The Edward Thal Co., Archts., have received bids for 3-story school; \$25,000. West Carrollton—Archt. E. J. Mountstephen, Dayton, has received bids for 2-story school building; \$20,000. Akron—Plans received September 1 for 2-story school building; \$40,000. Wm. F. Ginther, Archt., Cincinnati—Figures received October 1 for school building; \$225,000. Garber & Woodward, Archts., Ashtabula—Two-story centralized school will be erected; \$12,000. M. D. Paine, clk., R. F. D. No. 3. One-story district school will be erected; \$6,000. M. D. Paine, clk., R. F. D. Buchtel—Figures received for 2-story high-and-grade school building; \$40,000. Howard & Merriam, Archts., Columbus. Tiffin—Figures received for 2-story school building; \$50,000. E. H. Dornette, Archt., Cincinnati. Lakewood—Figures received for 2-story school; \$50,000. E. J. Schneider, Archt., Cleveland. Terrace Park—Archt. J. L. Chapman, Cincinnati, has plans for 2-story school building; \$30,000. Hiram—Figures received for 8-room high school; \$25,000. Wright & Wright, Archts., Columbus. Portsmouth—Bids received for school, Washington twp. G. F. Jenkins, pres. Cleveland—Plans have been prepared for 12-room school, 23rd and Chester Sts., and deaf school at E. 55th St. Canton—Plans have been prepared for high school. Zanesville—Twelve-room grade school will be erected; \$50,000. Aurora—Archt. E. M. Uhrich, Cleveland, has plans for 2-story school building; \$20,000. Columbus Grove—Archt. J. C. Huber, Toledo, has plans for 8-room parochial school. Rev. Theis, pastor. Rutland—Contract has been let for high school.

OKLAHOMA.

Mekuskey—Plans are in progress for 2-story school building; \$12,000. Address Bureau of Indian Affairs, Washington, D. C. Monroe—Plans have been prepared for addition to Central high school. Summit—School will be erected, District No. 41. Wainwright—School will be erected, District No. 56.

OREGON.

Albany—Bids received for erection of Union high school, Union High School District No. 1. Cottage Grove—Two-story school will be erected.

PENNSYLVANIA.

Bradford—High school and ward school will be erected; \$30,000 to \$40,000 each. Lancaster—Figures re-

ceived for 3-story school addition. M. R. Evans, Archt. Jeddo—Bids received for 5-room school, Hazle township. John Conahan, secy. Nanty Glo—Bids received for 2-story school, Jackson twp. Owen Roberts, secy. Natrona—Archt. I. F. Curhall, Tarentum, has plans for 2-story school building; \$50,000. Shenandoah—Archt. F. X. Reilly, Pottsville, has plans for 2-story school building. Weston—Archt. C. O. Beck, Hazleton, has plans in progress for 4-room school. Lost Creek—Archt. Wm. Hill, Pottsville, has plans for one-story school. Bids received September 13. Mt. Carmel—Sketches have been received for school building; \$150,000. Millvale—Bids received for two 2-story school buildings; \$10,000 and \$20,000 respectively. Barlberger & Barlberger, Archts., New Galilee—Bids received for school, Koppel District. Camden—Steps have been taken for erection of 16-room school, East Camden; \$100,000. Larimer—Bids received for erection of school. Philadelphia—Plans are in progress for five elementary schools. J. Horace Cook, Archt., New Castle—Figures received for school building; \$10,000. Plymouth—Bids received for 2½-story school building. Alfred Freeman, Archt., New York, N. Y. Soldier—Bids received for 3-room school, Winslow District. Alex. Watson, pres. Erie—Contracts let for two schools, 23rd and Cascade Sts., and East Ave. and Atkins St.

SOUTH CAROLINA.

Lake City—Proposals have been received for addition to grade school. Wilson & Sompayrac, Archts., Columbia.

SOUTH DAKOTA.

Houghton—Bids have been received for school, Lansing twp. A. W. Fangen, clk. Deadwood—Bids received for school at Trojan. W. W. Beach, Archt., Sioux City, Ia. Egan—Bids received for school, Dist. No. 57. Ardmore—Bids received for school, Duck Creek School District No. 8. J. H. Bell, chm. Bancroft—Plans have been prepared for 2-story school. Ethan—Bids received for school, Rosedale Independent School Dist. No. 1. R. J. Otterson, clk.

TENNESSEE.

Bristol—Site has been purchased for high school. Johnson City—High school will be erected next year; \$75,000.

TEXAS.

Deport—Bids received for 9-room school. Houston—Bids received for 2-story school. O. J. Lorehn, Archt., Port Arthur—Bids received for school. W. C. Parker, Archt., Austin—Plans have been prepared for negro high school; \$20,000. Palacios—Plans have been prepared for school; \$25,000. Hillsboro—Bids received for 16-room school. C. H. Page & Bro., Archts., Austin. Sinton—Bids received for high school. Courtney—Bids received for 2-story school. A. E. Lane, Archt., Houston. Waxahachie—Contract has been let for school building, Box rural school district; \$40,000.

VERMONT.

Bennington—Erection of high school is contemplated; \$40,000.

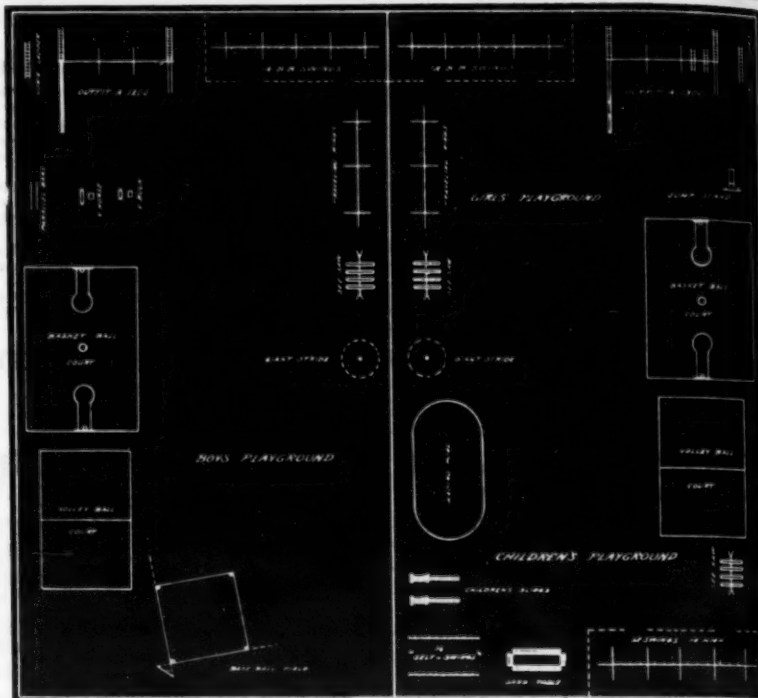
VIRGINIA.

Graham—School will be erected on College Hill; \$30,000.

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WASHINGTON.
Coupeville—Bids have been received for school, Dist. No. 2. Nelson Sill, clk. Wilkeson—Bids received for 2-story school building; \$25,000. Heath & Gove, Archts., Tacoma. Kosmos—Contract let for school; \$10,000. Tacoma—Proposals received for Central school and administration building. Hartline—School addition will be built. Warden—School will be erected, Dist. No. 109. Walla Walla—Proposals received for school. G. Tanson, clk. Ellensburg—\$11,500, bonds, have been voted for union high school. Tacoma—School will be erected at De Koven Station. J. R. Thompson, clk. Wilmot—Bids received for school, Dist. No. 5. J. N. Sanders, Corona, S. D.

WEST VIRGINIA.
Fairmont—Figures received for high-and-grade school; \$100,000. Shinnston—Figures received for 8-room school building; \$30,000. Belington—Archts. Holmboe & Lafferty, Clarksburg, have received bids for two 2½-story schools; \$19,000 and \$5,000. Parsons—Bids received for 2-story school building; \$20,000. West Union—Bids received for 2-story addition to school; \$16,000. Holmboe & Lafferty, Archts., Clarksburg. Kermit—Archts. Holmboe & Lafferty, Clarksburg, have plans for 2-story school building; \$6,000. Flemington—Archts. Holmboe & Lafferty, Clarksburg, have plans for school building; \$3,500. Paden City—Bids received for school, Lincoln District.

WISCONSIN.
Green Bay—Figures received for one-story school. Anderson & Williams, Archts. Blackcreek—Archts. W. W. DeLong, Appleton, has plans for one-story school. Conrath—Figures received for 4-room school. Hilton & Sadler, Archts., Janesville. New Glarus—Figures received for 5-room school building; \$14,000. Spooner—Bids received for school, Joint School District No. 3. Elderon—Bids received for school, Dist. No. 1. Wyeville—School will be erected. Byron—Figures received for 2-story school. Robert Messmer & Bro., Archts., Milwaukee. Milwaukee—Site has been selected for school at Oklahoma and Manitoba Sts., Fifth and Sixth Aves.; \$120,000. La Crosse—Archts. J. C. Llewellyn, Chicago, Ill., has plans in progress for 2-story manual training school; \$70,000. Montreal—Bids received for school. Henry Wildhagen, Archts., Ashland. Weyerhaeuser—Arrangements have been made for erection of school. Bethel—School is in course of construction. Stiles—Bids received for school, Dist. No. 2.

THE HYGIENE OF THE EYE.

(Concluded from Page 13)

herited predisposition to myopia. In passing from hypermetropic astigmatism to myopia, never at any stage does the eye become emmetropic.

The Necessity of Inspection and Glasses.

While all hygienic precautions and methods of teaching which will remove or alleviate causes of eye-strain, ought to be adopted in schools, such measures will not suffice to arrest the spread and progress of myopia. The neces-

sary work under the best hygienic arrangements will still cause strains on eyes congenitally hypermetropic, astigmatic, etc., which will bring on the causes of progressive near-sight. The correction by properly suited spectacles of the prevalent congenital defects of refraction, from which myopia is developed, is the only way to prevent the spread and progress of near-sight and its attending pathological conditions.

Therefore, systematic inspection, such as to be effective at the outset for detecting anomalies of vision, must be instituted. Only in this way can parents be warned of existing conditions of the eyes of young children, and of the inevitable injury to eyesight and general health if neglected, and be informed that those consequences may be generally averted by competently prescribed spectacles. If at the beginning of school life, congenital anomalies of refraction were corrected by suitable glasses, we would hear much less complaint of the harmful influence of the schools upon the eyesight and health of our children.

Experience in many cities has proved all and more than I say. As far as I am aware, Philadelphia took the lead in establishing effective inspection of the eyes of school children, under the able direction of Dr. S. D. Risley and a corps of competent assistants. Dr. Risley reported after twenty years' experience with his system of inspection in a broad field of practical application, and with full records of nearly two hundred thousand cases: "The almost universal resort to correcting glasses in all cases of weak eyes has proved a great boon to the school children of this city. When defects of refraction are carefully corrected (at the beginning) by suitable glasses, trouble is at an end in the majority of cases. * * * When this is neglected, * * * if the school work is continued with success, it is done by placing the integrity of the eyes in peril."

Dr. Risley's study of the two hundred thousand records proves, also, the importance of having glasses prescribed by competent oculists in-

stead of by opticians who fail to use the mydriatic which is absolutely necessary in many cases to determine the real error of refraction that is to be corrected. Misfitted glasses may be worse than none at all.

Reformed Methods of Teaching.

It does not fall within the province of the physician to sit in judgment upon the merits of educational methods, except as the physical well-being of the children is affected. In the latter regard there is unanimity of competent opinion that the amount of what the schools call "home study" should be reduced. It would seem to be a mistake from any point of view to require a tired and drowsy child to work over books at night in the family room until overcome by sleepiness. It would seem reasonable to suppose that five or six hours a day should be sufficient for the right progress in school studies of young pupils; and home life and time for recreation ought not to be so much encroached upon as is commonly the case. But the injury to health is enough to settle the question regardless of such considerations.

Since the strain on the eyes is greatest in near-work, blackboard and wall-map exercises and oral instruction ought to separate the studies that demand close application to reading and writing. Short recesses, gymnastic exercises, marching, etc., ought also to be interspersed in a reasonable way.

The Education of High Myopes.

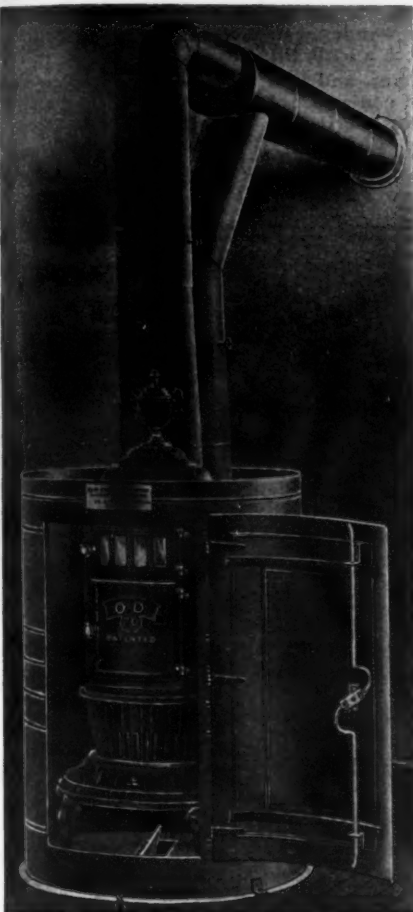
The difficulties connected with the education of children who are too short-sighted to be taught properly in the ordinary elementary school classes, and a new educational scheme for such children, are described in an article by N. Bishop Harman in the British Medical Journal, Oct. 29, 1910. The proposal applies, also, to many children who are kept, to their great injury, in schools for the blind, after a degree of vision has been restored which renders the methods of teaching the blind both ineffective educationally for such children and

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is exemplified in the Nation Wide Movement for better and more sanitary heating and ventilating of our schools, particularly in rural districts. The OLD DOMINION PATENT HEATING AND VENTILATING SYSTEM IS DAILY GROWING IN DEMAND in every State in the Union. Why?

It does not re-heat and circulate the foul air in the room.

It warms the room with pure fresh air and combines a duct or pipe to exhaust the vitiated or foul air. No other system does this.

It does not require a separate independent foul air flue of brick or metal as all other systems do.

It is simple, easy to set up, and easy to regulate. All other systems are complicated.

It does not clog with soot and rot out, requiring expensive experts to repair; other systems do.

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positively injurious to them. The proposed special classes would, therefore, include, besides the high myopes, children with eyes damaged from intestinal keratitis, phlyctenular keratitis, ophthalmia neonatorum, or purulent conjunctivitis of later years, congenital cataract, etc. For many years I have been advising the authorities of our state institution for the blind upon this point; but until the regular schools make some attempt to meet their plain duty toward children of defective eyesight but not doomed to become blind, the present deplorable conditions cannot be successfully dealt with.

Before mentioning a few of the points of the plan referred to, it should be remarked in passing that, on the other hand, children who are losing their sight and are surely doomed to blindness ought to be sent promptly to schools for the blind. If that course is not pursued some of the most valuable and effectual starting points are weakened or entirely lost. Good schools for the blind employ systematic methods which develop wonderfully the natural tendency of persons affected with progressive blindness to control defective visual perceptions by the sense of touch. Psychic conditions are thus produced in which the value of tactile perceptions constantly increases. The transference of qualities necessary for visual perceptions to tactile perceptions requires that persons, becoming blind later on, revive and retain the various visual remembrances and utilize them. Neglect or retardation of that transference obscures and confuses the pictures of remembrance, and produces that sad aspect of dullness and apathy, equivalent, as it were, to a psychic blindness.

Special Classes.

For the high myopes not doomed to blindness, and for children with damaged eyes but having too much vision for the methods of schools for the blind, special classes could be formed and conducted without any difficulty, either economical or pedagogical, in all school systems where classes of the same "grade" are reduplicated. The only question is whether

those in authority will give intelligent attention to their plain responsibility in this matter.

The enlightened school superintendent would work out particulars according to his own good judgment. Harman's proposal suggests that the instruction of the "myope classes," as he calls them, should be arranged under three different heads—oral teaching, handicraft, literary work. The teaching is done orally. Large maps and large chart and blackboard records, are used. The ordinary textbook is not used. The pupils are trained to listen and to think.

If the further suggestion were adopted, that many of the oral lessons, besides all drills, dancing, etc., could be given jointly with the normal sighted, perhaps a very favorable reaction upon teaching in general might result. It would probably be discovered that children, thus habituated to thinking and active learning during schools hours (as distinguished from "reciting" lessons supposed to have been learned in "home study"), make far better progress than results under the now prevailing methods of teaching.

Appliances.

For the teaching in these special classes, two appliances are necessary—tables for handicraft and blackboards for literary work. A specially designed desk provides the two requirements in one piece—a good sized table for handicraft, which, when it is turned up away from the child, becomes a large blackboard. Every kind of handiwork that requires a minimum of inspection and a maximum of feeling is used; for instance, modeling, mat-making, beadwork, simple carpentry, etc. Reading, writing, and such ciphering as needs script are taught with the use of the blackboards; the child writes free-arm fashion in large characters, each upon his own blackboard.

In conclusion, let me emphasize again that it is a great mistake to consider the eyes as separated from the whole organism. The eyes are directly and intimately connected with the entire bodily economy. The mistake of over-

looking eye-strain as a cause in systemic troubles is generally due to the fact that even when the effects are most prominent there is often little or no local disturbance to direct attention to the eyes.

The same is true of the reverse condition; and patients in whom prominent eye-symptoms appear often persistently seek relief from treatment of the eyes when the cause is not ocular. For example, patients are often given glasses by ignorant opticians for conjunctivitis of a purely nasal origin; or even an oculist may carelessly dismiss with a prescription for glasses the eye symptoms of the early stages of locomotor ataxia, thus allowing the disease to progress unrecognized and unresisted.

In general, if there is any functional or systemic disorder in the body, the eyes may participate in the consequences; and in the same way eye defects may influence other parts, or the whole constitution; and, therefore, those hygienic measures which are conducive to general health are of fundamental importance in maintaining the health and vitality of the eyes.

The California state board of education has reduced the price of textbooks by fifteen per cent, after learning that the books are being manufactured by the state printer at a saving of twenty-four per cent over the former cost. It would be interesting to learn how much cheaper the same books could be produced by a private concern.

Waltham, Mass. The board has voted to permit the use of school buildings for other than school purposes, provided the same is not in competition with public halls. The rules of the board require that the use of the buildings be restricted to civic, instructive or recreational purposes and that extra janitor service, heat and light be paid by the persons responsible for the use of the buildings.



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"How is your son getting along at high school?"

"Fine, fine. He's in a good dancing club and a very exclusive frat."—Kansas City Journal.

At the Kindergarten.

Teacher: Tommy, do you know "How doth the little busy bee?"

Tommy: No; I only know he doth it!

What Was the Question?

Tommy was day-dreaming when the professor suddenly asked him to give the parts of a Latin verb which he had just named.

"What is it?" whispered Tommy to his bosom friend, Ned, who sat next him.

"Dam 'f I know," answered Ned.

The professor was horrified as he heard Tommy promptly recite: "Damfino, damfinare, damfinavi, damfination."—Lippincotts.

A Family Name.

A new boy made his appearance in the school-room. The teacher asked for information for her register.

"What is your name?" she asked.

"Martin Luther Hicks," he answered.

"Martin Luther?" said the teacher. "I presume, Martin, you know for whom you were named?"

"Yes'm," answered the boy, brightening up. "I was named after me uncle on me mother's side. He keeps a liv'ry stable."

He Knew.

Teacher: Now, Tommy, what is a hypocrite?

Tommy: A boy who comes to school with a smile on his face.



Old Lady: "Why are you hitting that little boy?"

Part Time Students: "His father is on the school board and proposes an addition to our school, so we can go to school all day".



Phipps: "So Bookison has been sent to the insane asylum?"

Scripps: "Worse than that. He claims to have devised the semi-slant vertical copybooks that settle all further controversy on the subject."

Earning Money.

"I'm earning money to pay my way through high school."

"Brave girl, how do you earn money?"

"Well, father gives me five dollars for every singing lesson I don't take."—Washington Herald.

The Gender.

Teacher: "Willie, what's the masculine of 'laundress'?"

Willie: "Chinaman."—Town and Country.

The Seasons.

Teacher: What are the four seasons, Sally?

Sally: Pepper, vinegar, salt and mustard.

How the Superintendent Was Effected.

"There's not a particle of ventilation in this room," said the superintendent, suddenly stopping in his talk and looking about him.

"Can you boys tell me what it does to a man to be in a room when there is no ventilation?"

"I should say it filled him with hot air," replied one of the daring ones.—Yonkers Statesman.

Observation.

The supervisor was inspecting the rooms. He decided to test the observation of the pupils.

"Now, children," he said, "tell me a number to put on the board."

Some child said, "Thirty-six." The supervisor wrote sixty-three.

He asked for another number, and seventy-

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six was given. He forthwith wrote sixty-seven. Nothing was said.

When a third number was asked, a child who apparently had paid no attention, called out: "Theventy-theven. Thange that, if you tan."

Her Age.

Professor Holovtchiner of the Omaha, Neb., school board, was endeavoring to help Superintendent E. U. Graff solve the age problem of the kindergartners at one of his schools. He made one attempt and then gave up. His subject was a dimpled little girl who did not look a day over four, and backed by all the majesty of his position, asked: "How old are you?"

"Five, thir," lisped Dimples.

"Five? When was your birthday?"

"Lath May, thir," responded Dimples, with an engaging smile.

"Did you have a birthday party?" asked Mr. Holovtchiner, with deep guile.

"Oh, yeth, thir," said the little girl.

"How many candles did you have on your birthday cake?"

Dimples hesitated, then answered, "I didn't have no candleth on my cake."

Mr. Holovtchiner retired and the teacher and superintendent smiled.



Father: "I thought I promised you an automobile if your September record at school would warrant it. You have failed. Why?"

Boy: "I have been learning to run the kind of a machine I want."

Number Work in the Second Grade

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The names given below are those of the leading and most reliable School Supply Houses and Publishers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms. If any desired item cannot be found listed, write to Wm. Geo. Bruce, Publisher, Milwaukee, Wis.

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Milton Bradley Co. Springfield, Mass.
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"How is your son getting along at high school?"

"Fine, fine. He's in a good dancing club and a very exclusive frat."—Kansas City Journal.

At the Kindergarten.

Teacher: Tommy, do you know "How doth the little busy bee"?

Tommy: No; I only know he doth it!

What Was the Question?

Tommy was day-dreaming when the professor suddenly asked him to give the parts of a Latin verb which he had just named.

"What is it?" whispered Tommy to his bosom friend, Ned, who sat next him.

"Dam 'f I know," answered Ned.

The professor was horrified as he heard Tommy promptly recite: "Damfino, damfinare, damfinavi, damfination."—Lippincotts.

A Family Name.

A new boy made his appearance in the school-room. The teacher asked for information for her register.

"What is your name?" she asked.

"Martin Luther Hicks," he answered.

"Martin Luther?" said the teacher. "I presume, Martin, you know for whom you were named?"

"Yes'm," answered the boy, brightening up. "I was named after me uncle on me mother's side. He keeps a liv'ry stable."

He Knew.

Teacher: Now, Tommy, what is a hypocrite?

Tommy: A boy who comes to school with a smile on his face.



Old Lady: "Why are you hitting that little boy?"

Part Time Students: "His father is on the school board and proposes an addition to our school, so we can go to school all day".



Phipps: "So Bookison has been sent to the insane asylum?"

Scrapps: "Worse than that. He claims to have devised the semi-slant vertical copybooks that settle all further controversy on the subject."

Earning Money.

"I'm earning money to pay my way through high school."

"Brave girl, how do you earn money?"

"Well, father gives me five dollars for every singing lesson I don't take."—Washington Herald.

The Gender.

Teacher: "Willie, what's the masculine of 'laundress'?"

Willie: "Chinaman."—Town and Country.

The Seasons.

Teacher: What are the four seasons, Sally?

Sally: Pepper, vinegar, salt and mustard.

How the Superintendent Was Effected.

"There's not a particle of ventilation in this room," said the superintendent, suddenly stopping in his talk and looking about him.

"Can you boys tell me what it does to a man to be in a room when there is no ventilation?"

"I should say it filled him with hot air," replied one of the daring ones.—Yonkers Statesman.

Observation.

The supervisor was inspecting the rooms. He decided to test the observation of the pupils.

"Now, children," he said, "tell me a number to put on the board."

Some child said, "Thirty-six." The supervisor wrote sixty-three.

He asked for another number, and seventy-

"A good article becomes its own advertiser to a large degree."—Ad Sense.

Perhaps this accounts for the fact that we are selling more Dixon Pencils than ever before. If you have been reading the Dixon Advertisements you may have wondered why we spent so much time and money in talking about such a little thing as a Lead Pencil.

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JOSEPH DIXON CRUCIBLE CO.
Jersey City, N. J.

six was given. He forthwith wrote sixty-seven. Nothing was said.

When a third number was asked, a child who apparently had paid no attention, called out: "Theventy-theven. Thange that, if you tan."

Her Age.

Professor Holovtchiner of the Omaha, Neb., school board, was endeavoring to help Superintendent E. U. Graff solve the age problem of the kindergartners at one of his schools. He made one attempt and then gave up. His subject was a dimpled little girl who did not look a day over four, and backed by all the majesty of his position, asked: "How old are you?"

"Five, thir," lisped Dimples.

"Five? When was your birthday?"

"Lath May, thir," responded Dimples, with an engaging smile.

"Did you have a birthday party?" asked Mr. Holovtchiner, with deep guile.

"Oh, yeth, thir," said the little girl.

"How many candles did you have on your birthday cake?"

Dimples hesitated, then answered, "I didn't have no candleth on my cake."

Mr. Holovtchiner retired and the teacher and superintendent smiled.



Father: "I thought I promised you an automobile if your September record at school would warrant it. You have failed. Why?"

Boy: "I have been learning to run the kind of a machine I want."

Number Work in the Second Grade

can be made interesting and definite. See the HARRIS-WALDO FIRST JOURNEYS IN NUMBERLAND. Beautifully illustrated, \$0.35

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The names given below are those of the leading and most reliable School Supply Houses and Publishers in the United States. None other can receive a place in this Directory. Everything required in or about a schoolhouse may be secured promptly and at the lowest market price by ordering from these Firms. If any desired item cannot be found listed, write to Wm. Geo. Bruce, Publisher, Milwaukee, Wis.

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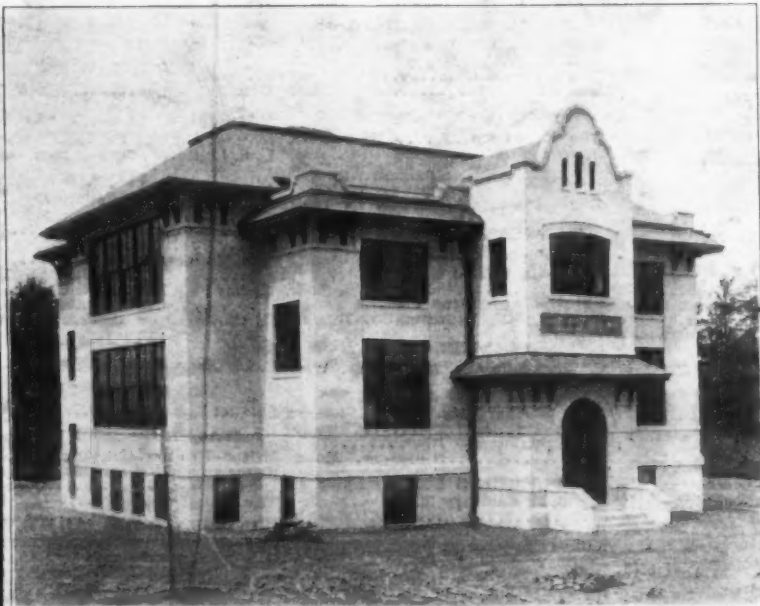
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